

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



WAYSIDE BEAUTIES



OCTOBER, 1884.

CLEANLINESS and health are intimately connected. This fact is frequently brought to our attention by some great calamity, and yet oftener in every community by individual cases, the lessons of which should in the aggregate have the force of the highest law. These lessons, however, are but slowly learned and imperfectly practiced. From the earliest civilization of European nations to the present time there has been a gradually increasing attention to cleanliness of person, and of homes and places of business and recreation. But a great advancement in this direction is still before us. Ill ventilated dwellings, workshops, churches, school-rooms and public halls and lecture rooms are so common almost everywhere as to greatly annoy and discomfort all, and especially those who have learned to prize and enjoy pure air and its beneficent effects. The subject of ventilation is one of vital interest, and is most intimately connected with our health and comfort, and should be brought to the attention of our children from early infancy.

But this subject of ventilation is hampered by the question of sewage, and until this question is properly disposed of a pure atmosphere about our dwellings will be impossible. At the present time the telegraph brings us the news every morning of the progress of that dread

disease, the cholera, in European countries, always with the fact that it makes lodgment for prevalence and spread on new centers in the most filthy localities. The facts in regard to the city of Memphis, Tenn., a few years since, when for two successive seasons it was visited by a mortal fever, are fresh in our memory, as are, also, those relating to its subsequent cleansing and drainage, and the resultant healthfulness. These instances we are all acquainted with, but in almost every city and village there are localities where, from time to time, the intimate relation of filth and disease are strikingly and painfully exhibited. When water works came into use it was thought that for these places purity was ensured. But a new monster in the form of sewer-gas made its appearance, and which, to the present time has baffled all the ingenuity of engineers. Then, again, it is found that all the rivers, streams, lakes and bays that receive the sewage are, or are becoming, foul to the extent of being unhealthy; in many cases making the water unfit for the fishes that formerly occupied them. In country places a cess-pool is an adjunct of almost every dwelling, only with the most intelligent has it yet given place to the dry-earth closet. Even when water works are in operation in all our inland towns the cess-pool is yet, for the greater number

of residences, the receptacle of the human excreta, and filling the air with its noisome gases. The expense of the sewerage of cities is very great, but it is far greatly enhanced by the necessity of draining the offensive matter to distant outlets. The removal of the surplus rain water from our streets and cellars would be a simple process compared with the drainage of all the excreta of the inhabitants.

Again, we are obliged to recognize almost everywhere that our water supplies are being needlessly and shamefully polluted by the drainage of those who occupy the banks of the streams and lakes whence they are drawn.

But there is another aspect of the question. With all the expense, damage and offensiveness the present systems entail, there is besides the loss to our lands of manurial substances of the highest value. And it is to this point we wish to direct the attention of all cultivators of the soil, that they may perceive that it is for their immediate pecuniary interest to change the present methods of disposing of our excreta, and adopt others which shall ensure its return to the soil whence it was originally derived.

Some months since, a paper was read by BENJAMIN WARD RICHARDSON, M. D., F. R. S., on *Vital Steps in Sanitary Progress*, before the Society of Arts, and published in its *Journal*, which discusses the main points in this subject with great clearness and ability. His observations relate principally to London. For great cities he claims that two separate systems of sewage are necessary; one for surface water, the other for excreta, which, at its outlet, shall be received and treated so that it can be conveniently forwarded and applied to the soil for the benefit of the crops. "In saying so much," he remarks, "for the separate system I do not, however, wish to contend for the introduction of that system in the hard and unchanging line which some would fight for. I know quite well, from the inspections I have had to make, officially, of different towns and districts, that there are centers of population in which the separate plan, in its rigid application, is not suitable. A town may have no river into which its storm-water can run. A town may have a river but no land near to it which can be cultivated.

"These conditions may affect details, while they need not affect the principle. For storm-water for which there is no natural outlet there is always the good resource at hand of storing it for domestic use. For sewage that cannot be utilized on land near to the community which yields it, there is always land not far away which is waiting for it. In these days there need never be necessity for any difficulty in the removal of sewage day by day from the largest centers of population, presuming always that it is not mixed and increased in volume by storm-water.

"Closed sewage-tanks movable by night train, closed sewage-tanks movable by steam-power on sewage canals and rivers, closed tanks movable by steam-power on the sea, could convey away all this product for fertilization, and deposit it where it could administer its full benefits to the earth. Barren portions of our seacoast could, by these modifications of the separate system, be made the most fertile and beautiful of all our tracts of vegetation.

"To the engineer, when once a system were decided on and declared, these modes of transit and many improvements on them would occur. We have but to declare the principle, and get it fixed, that every town in England must be cleansed of its organic excreta out and out, day by day, as certainly as it is supplied with the food that is brought into it, and the thing will be done.

"The utter failure of the combined system as a permanent solution of the drainage difficulty, and as a mere transition from the cess-pool to the method of removal, day by day, combined with immediate and fruitful utilization, is of itself becoming apparent with such swift conviction that it will come, whether assisted or not by our will and deed. But it were wise to hasten it, and it is one of those pressing practical things which we could hasten effectively if, irrespective of all interests but true ones, we laid ourselves out for the duty."

Although not directly stated, it is apparently inferable from this paper that cess-pools are no longer tolerated in London, and, also, that in many parts the drainage is quite imperfect.

"My contention is that the decomposition from accumulations of sewage, which

gives origin to the gases that are let out by thousands upon thousands of channels, by tubes from houses, by soil pipes within houses, by accidental openings and pores in all directions; by gullies in streets, by great outlets of sewage, ought never to have been generated at all, but that the sewage, removed clean away hour by hour, many miles from the community, without having decomposed either above or below the living place, should never infect the place nor have any destination except the land which is calling for it and dies if its demands be not naturally supplied."

In this country, to our shame it is to be said, cess-pools are allowed even in our largest cities. In our villages and smaller cities, or those having less than a quarter of a million inhabitants, we believe that the system of dry earth closets could be practically applied, and at no greater expense than sewerage as now practiced; that all offensive matter could be removed and applied to agricultural lands. The coal ashes, where coal is used, annually produced in each family, with the addition of a smaller quantity of dry earth, will furnish the vehicle for the removal of all excreta.

This is a subject which should command the attention of the whole people; everywhere a change is demanded in practice, and individuals and communities should earnestly set about a purification that is as necessary to comfort as to health.

GOLDEN MOCK ORANGE.

The common Mock Orange, *Philadelphus coronarius*, is a shrub so well known and highly prized that it would be almost superfluous to direct attention to it, though our observation is that it is not cultivated as generally as it deserves. There are few places that can afford to be without this free-blooming and deliciously sweet-scented shrub, that fills the air with its perfume, and delights the eye with its sheet of white bloom for a considerable time in the spring.

Our object at present, however, is to notice a variety of *Philadelphus* which is yet but little known; this is the Golden-leaved Mock Orange. This plant, which is of lower growth than the common Mock Orange, has flowers similar to it in appearance, but its strikingly distinct fea-

ture is its foliage, which, like that of *Spiræa opulifolia aurea*, is golden-yellow tinted, contrasting strongly with ordinary green foliage, and giving the plant an individuality that is attractive during the



PHILADELPHUS AUREUS— $\frac{1}{2}$ NATURAL SIZE.

whole season of leafage. The judicious mingling of yellow, variegated, and dark-leaved shrubs and trees with those having foliage of the ordinary color has a most pleasing effect in the appearance of grounds, like the satisfactory blending of lights and shades in a well-executed picture. On grounds of some size, quite a number of varieties and species of the *Philadelphus* can be introduced to advantage, and the season of bloom of this plant be much extended, as they vary in this respect, some producing their flowers a month later than others. Quite a number of them are natives of this country,

and all are hardy in all parts, vigorous, and not subject to disease, and long-lived and adapted to open, sunny situations.

WAYSIDE BEAUTIES.

After midsummer, in this country, our rural landscape is everywhere brightened by the Golden Rods and Asters; they form a distinct and beautiful feature of the scenery. The eyes of our countrymen are everywhere gladdened by their smiles, north and south, east and west, on the hills and the mountain sides, in the valleys and on the broad prairies, by the roadsides and the streams, and in the fields and copses they stand as tokens of the genial heat that brings from the soil the golden grains and the beautiful, luscious fruits. No other country in the world is thus characterized; these plants belong to America, and as such should be our pride and delight. These remarks apply with equal force to the Helianthus, the eight-rayed flower shown in our colored plate, and also the Heliopsis of deeper yellow tint; though these are not seen in as great abundance as the Golden Rods, they are none the less distinctly American, and are usually found on the margins of streams and on low grounds. While, on this continent, there are from sixty to seventy species, and perhaps more, of the Solidagos, or Golden Rods, and nearly all of them of vigorous habit, growing from a foot to eight feet in height, all the world besides affords less than a dozen, and these, for the most part, of small size, and confined to few localities of limited area, and always in such small numbers as to make them rare plants.

The species of Asters, in this country, are still more numerous than those of the Golden Rod. Both are the children of the sun, basking in his favors and reflecting his smiles. Although many indigenous species of flowers are peculiar to this country, yet none so abound and apparently claim possession as these. And grouped together they might appropriately be taken as our national flowers, emblems of endurance, vigor, light and freedom.

That devoted son of nature, THOREAU, in his description of *A Week on the Concord and Merrimac Rivers*, thus mentions these flowers: "Having passed the New

Hampshire line and reached the Horse Shoe Interval in Tynesborough, where there is a high and regular second bank, we climbed up this in haste to get a nearer sight of the autumnal flowers, Asters, Golden Rods and Yarrow, and Blue Curls, *Trichostema dichotoma*, humble roadside blossoms, and, lingering still, the Hare Bell and the *Rhexia Virginica*. The last, growing in patches of lively pink flowers on the edge of the meadows, had almost too gay an appearance for the rest of the landscape, like a pink ribbon on the bonnet of a Puritan woman. Asters and Golden Rods were the livery which nature wore at present. The latter alone expressed all the ripeness of the season, and shed their mellow lustre over the fields, as if the now declining summer's sun had bequeathed its hues to them. It is the floral solstice a little after midsummer, when the panicles of golden light, the sun-dust, have, as it were, fallen like seeds on the earth, and produced these blossoms. On every hillside, and in every valley, stood countless Asters, Coreopsis, Tansies, Golden Rods, and the whole race of yellow flowers, like Brahminical devotees, turning steadil with their luminary from morning till night.

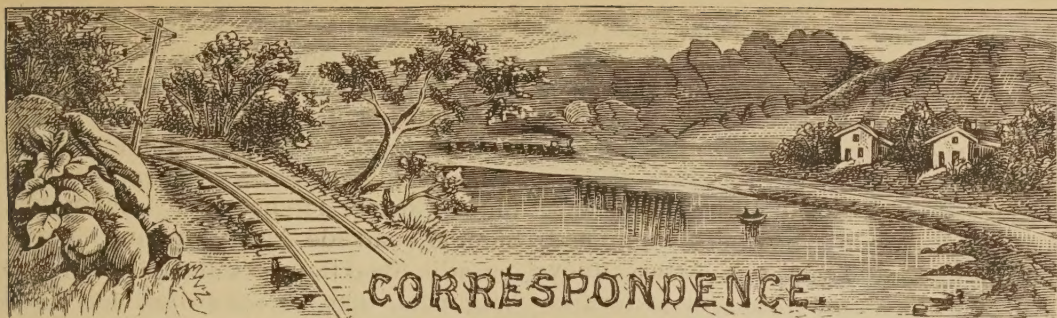
" ' I see the Golden Rod shine bright,
As sun-showers at the birth of day,
A golden plume of yellow light,
That robs the day-god's splendid ray.

" ' The Aster's violet rays divide
The bank with many stars for me,
And Yarrow in blanch tints is dyed,
As moonlight floats across the sea.' "

BRYANT, in *The Death of the Flowers*, writes:

" But on the hill the Golden Rods, and the Asters in
the wood,
And the yellow Sunflower by the brook in autumn
beauty stood."

While these plants occupy so largely our landscapes, there is little incentive to their cultivation, and yet, here and there the occasion will arise for their proper employment on grounds of considerable size, where the features of the park and the wild garden are prominent. On account of their hardiness and perennial character, their collection and transplanting is not difficult; but any that may be desired for removal should be selected when in bloom, and have their places marked. They can be taken up and re-set either in the fall or spring.



APPLES—PRIZE ESSAY.

How can Apples be profitably raised?

The culture of the Apple is an important branch of farm and garden production. Not only is there a large home demand, but there is so good a foreign demand that it has come to be an important article of export. With the short crop the past season some sixty thousand barrels have been exported, seventy per cent. from New York, thirteen per cent. from Boston, and seventeen per cent. from Montreal. In 1882 some three hundred thousand barrels were exported. Apples are too high at home to be profitably exported this season. Liverpool is the great receiving port for American Apples. Besides those exported in the green state, many tons are exported in the form of canned, or evaporated product. The evaporating and canning establishments greatly enhance the value of the poorer class of Apples, and prolong the season of Apples the year round.

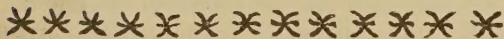
Most all soils are good for Apple trees if thoroughly drained, either naturally or by good underdrains. On naturally heavy lands we would recommend setting the trees immediately over the drains, which should be laid at least three feet deep. The extending roots would be away, instead of toward the drain, and the tree itself would be in the best possible position for drainage. The ground between should be broken up deeply and thoroughly pulverized and manured. We are among those who believe in applying barn-yard manure, ground bone, ashes and compost liberally to all lands in Apple trees, and well working the fertilizers into the soil. We believe in mulching with any available material, even small stones or Spruce or Fir boughs, if nothing better is at hand, and a circle about the trunk of the tree

whose circumference shall be beyond the outmost ends of the limbs. We believe in keeping the land among growing trees cultivated in some hoed crop, like Corn, Potatoes, Beans, roots, Peas or pickles, and in an annual manuring. After the trees have begun to bear well the land may be lightly stocked down to grass, and calves, sheep or swine pastured in the orchard to advantage. The mulching should be continued until the trees pretty much shade the ground. To prevent injury to the trees from the stock by oiling the trunks from the fleece or gnawing the bark with the teeth, drive a row of stakes inside a hogshead hoop or large cask hoop laid on the ground, with the tree in the center, then raise the hoop to the top of the stakes and nail each stake to the hoop. Brush piled up about the trunk is better than no protection. The animals keep down most of the grass and weeds and use up the wind-falls, immature and wormy fruit.

Much extent of trees may be grown along roadsides and permanent fences. The fence affords a partial mulch, and trees do particularly well beside a stone wall. They are practically out of the way of the plow, harrow, mower, rake and other farm machinery. They may be set near together, one rod apart will do very well. On most farms enough orcharding may be had for all practical purposes by setting lines of trees by roadsides and permanent fences. It is not only practical, but adds beauty to the outlines and helps the landscape. There are also lots of natural orchard lands as yet unutilized, such as rough hillsides, nooks, corners, coves, gulches and rocky waste places. Nature, in fitting these natural sites for Apple trees, has spoiled them for most other purposes. Strong, vigorous volunteers on many of these

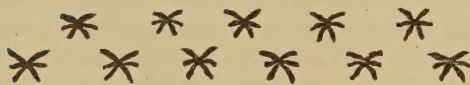
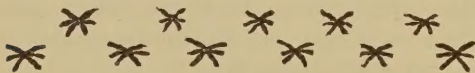
attest the natural adaptation. On these rough or waste lands trees may be set irregularly, and in most promising chances and places. They may be set thicker than on more arable lands. We believe that the best interests of our farmers and of our agriculture imperatively calls for the developing of these natural orchard lands.

If we were setting trees on good, arable land, we would set them in long rows, quite thickly in the row, with wide spaces between the rows, thus :



Why? Because this plan would admit of free cultivation or operation between the rows. It would admit of a continuous mulch along the rows, and admit free circulation of air and sunlight, two important things, and of easy access to and among them with team. We would have them twelve to twenty feet apart in the row, and the rows to be four to six rods asunder.

Another plan, is the "matted row," to borrow an expression from the Strawberry growers :



We should very much prefer one of these ways to either the square or quincunx form. It is very difficult to work among trees set in the usual way without injury to them from team or implements, or both.

Eternal vigilance is said to be the price of fruit. The caterpillar, canker worm, fall web worm, borer, codling moth head the list of many formidable insect enemies. The bark louse, and Apple maggot, *Trypeta pomonella*, a new comer, by the way, that burrows and permeates the pulp in all directions, itself, when grown, hardly the sixteenth of an inch long, are to be met and fought. The whale oil soap, and knife and wire, and

many other appliances are needed in the fight for fruit. The novice must study his business, and the experienced have need to practice all they know. But what branch of farm production is exempt from insect enemies or climatic conditions?

The key of the whole position is fertilization. Feed the trees and they will pay you. The better trees are fed and cared for the sooner they grow and the sooner they bear. The faster they are pushed the sooner the investment pays; the less time the caterpillar and the borer has to work upon them. As a rule, the orchards are not half fed. The Apples of the United States might be improved as a whole one hundred per cent., both in quality and amount from the present bearing trees by manuring alone. This is a fact that cannot be gone behind successfully. We believe in working an orchard or a fruit tree for all it is worth, for all it has capacity.

Near cities and ready markets the best summer and fall varieties will pay well; but for the great bulk of the crop of the country it is wisdom to grow those best hardy varieties that are hard in flesh, long keepers, and at the same time well colored and pleasing to the eye. Quality is to be sought for, and our best winter and spring Apples will give, on the whole, the most satisfactory returns. In planting a new orchard be careful to select varieties best adapted to the particular locality, and this information should be gained from the most trustworthy sources. Raise only fine varieties. Pack them honestly. Carefully hand-pick them from the tree. Keep them until sold in a moderately damp cellar, but a few degrees above the freezing point. Have the cellar fairly ventilated. Wash out and dry each barrel before putting Apples in for the market. Reputation for good, honest Apples once established and followed up, means sometimes one dollar a barrel over questionable lots. "Honesty is the best policy," said the old man to his son, "I have tried both." Set none but first-class trees; set good sized trees; set them carefully. Use plenty bone and ashes about them. Study the varieties best adapted to the locality. Feed liberally, care for them sensibly, and success will crown the work.—J. W. LANG, *Bowdoinham, Maine.*

THE FLOWER FIEND.

Plenty has been said and written about the "card fiend," that terror of unfortunate merchants, but very little ever appears in print concerning that other disturbing element in society, "the flower fiend." True, an occasional wail breaks forth in the columns of a floral publication, as some over-burdened victim's back gives way under the last straw laid on by this merciless being, but, as a rule, the plant-lover has learned to "suffer and be strong." I wish, however, to be an exception to the general rule, by making a public protest against this "haunting atrocity," which has about as many forms as PROTEUS could boast.

Two of these forms are to me most repulsive. First, the woman, for it is almost invariably a female, who, as soon as she hears of the death of any one with whom she can claim the slightest relation or acquaintance, and with whom, during life, she may have been utterly at variance, constitutes herself directly into a delegation to visit every unfortunate wretch in the neighborhood who is so inconsiderate as to have a flower in bloom, in order to demand the same. You are, perhaps, soothed by the reflection that the departed one cares just as much about flowers now as in life, never having taken half the interest in them as in a hill of Potatoes, but even this sustaining thought hardly mitigates your grief when you are compelled to tear off the few choice blossoms just open, which have cost you so much care and have been looked forward to with such pleasant expectation by your family and yourself. As you deliver your treasures to the despoiler you may be still further consoled by the reflection that affection for the dead has no part in the demand she has made upon you, but that it proceeds wholly from the praiseworthy desire to appear before "the relatives" laden with spoils, in order to receive their commendation for bringing such a quantity of flowers. Such generosity reminds me of ARTEMUS WARD's desire to prosecute the late war, when he said, "If wuss comes to wuss I'll shed ev'ry drop of blud my able bodied relatives has got to prosekoot the war." It does not require a great deal of self-denial to give away other people's property. I do not wish to say aught

against the beautiful custom of placing flowers in the coffins of those whom we loved and revered during their lives, and especially of those who cherished flowers. What could be more appropriate than placing them in the quiet hands which labored faithfully to care for them while they could; but the thought of heaping flowers upon the last resting place of one who had a contempt for them while living, is enough to upset all one's ideas of "the eternal fitness of things." Flowers for the dead must be a voluntary tribute or they are nothing but a mockery. When they cease to be the evidence of our affection, when the gift becomes degraded into a mere fashion, "the thing to do," then let people have a little consideration for their neighbors and do justice to the florist by sending him their orders and paying the bill. I may be thought severe, but when I see a neighborhood laid under these forced contributions, time after time, and people in limited circumstances, who have a few flowers, which they are so fond of, made to give them up for the funeral, in one instance, at least, of one who was said to care nothing for them during life, and whose relatives were abundantly able to purchase them, if they were needed, I think I may be pardoned if I say that I think it is a little too much for human endurance. There is in my case, and that of my fellow sufferers in this locality, one sustaining thought, we live in an exceptionally healthy region. Of course, this does not relieve us from a few reasonable demands in the way of bouquets for those who wish to send them to absent friends, flowers and leaves for all extra doings of any kind, both religious and secular; but one should become resigned to this, since it is a part of the penalty for being so rash as to raise flowers.

The second form of floral pests to which I particularly object, is the individual who, with plenty of money for the milliner, dress-maker and fancy store, has never a cent for the florist, but coolly comes to you and requires cuttings of your choicest plants to stock her conservatory.

It does seem as if some people labor under the impression that house-plants are legitimate prey, and that it is a reprehensible thing to buy them; but so long as they can get them without cost-

ing anything it is perfectly correct to do so. To such people I would say, that economy, when practiced at the expense of your neighbor, is anything but commendable.

Then there are other forms a little less aggravating than the preceding, perhaps, but still trying enough to weaken the patience of Job. For instance, the individual who always lets her plants freeze or die of neglect in the winter, and then cheerfully comes to you to make up her loss.

Another specimen is the party who seizes every plant she may take a fancy to, and begins to investigate for "slips," audibly wondering if there are any on it. Of course, you are required to take the hint, and if your plant has a solitary branch on it, either sacrifice it or be considered a monster of stinginess. Then there are the hundred and one good people who come to you in the spring to replenish their exhausted stock, taking it for granted that you are perfectly able to do so. Doubtless, such unlimited faith in your ability and willingness are very flattering to your skill and good nature; but after looking at the few plants you have struggled to get through the winter in this inhospitable climate, and seeing many of them haggled out of all symmetry and beauty to gratify such demands as these, it is no wonder if you exclaim, as did the apostle of old, that "faith without works is dead," and wish, from the depth of your tired heart, that your friends would not have quite so much "faith," and leave you all the "works."

I remember an instance when faith did not get rewarded, for when one enterprising individual told me she would like enough Geraniums for an entire bed, I was obliged to decline the honor of furnishing them. I trust I may not be considered "stingy" when I make this confession, as I had not even a bay window to raise plants in.

Some people seem to labor under the fallacy that if a plant has flowers it is all that is required, and the form of the plant has nothing to do with its beauty, therefore, it is no wonder that such people require cuttings of you, for they seem to have no idea except that the plant has a branch or two on it, and that therefore they might as well have it as

not. To such I can only say that the beauty of a plant often consists quite as much in the symmetrical growth as in any flowers it may produce. Surely there is little that is satisfactory in a Geranium that has a long, scraggly growth with a tassel of flowers at the remote end of its attenuated branches, and this Geranium is no exception to the general rule. Plants, in order to be attractive, should be grown in fine shape, and the flowers are very often only a secondary consideration.

There are a few things which those who go forth to require plants should bear in mind. First, that the spring is a very inconvenient time, and that in the autumn one has usually plenty of cuttings and plants to spare. Secondly, that it is hardly right to ask your friends to cripple their plants, and, perhaps, utterly ruin them, in order to give you "slips." I think it is well for those who keep house-plants to make all the cuttings they can, without injuring their plants, that they may have them to give to those who cannot afford to buy them, and to those who have not the same varieties. Very often one sees a little branch or a tiny bulb which can be removed from the parent plant without harming it in the least, and which would be highly prized by some one who loves flowers. I am not "stingy" with plants. "Perish the thought." I think there are few people with a genuine love for those beautiful works of the great Creator "who gives us all things richly to enjoy," who are not willing to give slips and cuttings away to others of like tastes with themselves.

Whether there is something in floriculture that brings us, through communion with nature, close to "nature's God," and "opens" the heart, I cannot say, but I rarely see a person who cultivates flowers who is unwilling to share them with his neighbors. When, however, we do find one who seems to wish to "get all she can, and keep all she gets," we are safe in concluding that, for once, flowers have failed in their mission. It is one of the greatest pleasures in cultivating them that you are able to often realize the fact that "it is more blessed to give than to receive." It is only the enforced giving that I protest against.—X. Y. Z.

CHEAP FLOWERS.

Last summer, one of my neighbors having ordered a large package of five-cent flower seeds, had marvelous success with what she called her cheap flower garden. However, the effect was not cheap, as the most indifferent to flowers were obliged to acknowledge.

Adonis, Snapdragon, Datura Wrightii Phlox, Poppies, Perilla, Love-lies-bleeding, one or two everlasting flowers and ornamental grasses grew in a narrow bed along the yard fence. In another bed were perennials, spring Adonis, Columbine, Foxglove, English Primrose, Rocket, Perennial Phlox, Canterbury Bell, Sweet William, Perennial Poppies, and Valeriana. On a rough, unsightly fence were Calampelis, Balloon Vine, Sweet Peas and Nasturtiums. On a rock-work, in an out-of-the-way corner of the yard, were Nolana, Sweet Alyssum, Portulaca and Gold Dust. In a narrow bed, by the side of the house, were Candytuft, Dianthus, Agrostemma, Eschscholtzia, dwarf Nasturtiums, dwarf Nigella, Nemesia and Swan River Daisies. On the shady side of the house were Nemophilas, Clarkias and Leptosiphon. On a bench by the side of the door, growing luxuriantly and blooming profusely in boxes, crocks and broken jars, were dwarf Convolvulus, dwarf Scabiosa, Anagallis and Whitlavia. On a shelf, over the bench, were Portulaca, Saponaria, Calandrinia and Gypsophila. On a shelf at the other side of the door, in a broken teapot, was Sweet Mignonette. There were hanging baskets of Dew Plant, Ice Plant, Nolana, Sweet Alyssum, trailing Peas, scarlet and yellow winged. Over the doors were trained Morning Glories, and over the windows were latticed Cypress, scarlet, rose and white.

Thus a rough fence, broken vessels and a poor house were made beautiful during the flowering season, with little cost and the time that many women squander.

Flowers are a luxury to the rich, a necessity to the poor. The worse the house the greater the necessity for vines to cover it; the plainer the furniture, the scarcer the books, papers and pictures, the greater the necessity for bright flowers in the house and door-yard. Vines will grow just as luxuriantly on a rough, unpainted wall as on the most costly edifice. The most picturesque

Ivy-mantled cottage I have ever seen was not a gabled nor balconied cottage, but a double log cabin embowered in a wild Cucumber vine.

In western towns most houses have more or less yard and garden room. Many of these yards are arranged with taste, but again, many are bare and neglected. If the families who possess these barren, dusty yards have girls, usually they spend their time in making, re-making and making over their clothes and walking the streets. They like flowers, admire their neighbor's Verbenas ever so much, but never seem to think of cultivating them at home. If these inoffensive, though idle, girls could be induced to spend a part of their pin money for flower seeds, and to cultivate and care for them properly, it would be a great blessing to them and to the community. Floriculture is an antidote for idleness, and if the persons here alluded to could be interested in it they would become more industrious, a greater part of their time would be spent at home, their taste for the beautiful would be improved, and it would, in a great measure, stop that aimless walk, walk upon the pavements, so monotonous to their more industrious neighbors and so distressing to their friends. Natural flowers would make more tasty ornaments than the cheap finery they covet.—MARGARET DONALDSON.

MY BED OF ANNUALS.

The brightest spot in my garden, the one which I like most to look at, which gleams through sun or rain with the same soft, cheery summer shine on the faces of its many hued blossoms is my bed of annuals. There are Verbenas, pink, white, blue and royal purple; Phloxes of every shade, from dazzling scarlet down to white; Portulacas, little salamanders, of brilliant hues, as double as little Roses; Pinks in white and cardinal dresses; Petunias run up the trellis work in the center, and, as the bed is a round one, nod knowingly in all directions. The Pansies, dear little faces, are next my window, and are all named for friends to whom I talk when I am lonely. This little bed of annuals is less trouble and a source of more pleasure to me than all my aristocratic hot-house plants put together. They require no petting or coax-

ing. I have only to dig up the earth in the spring, so as to have it soft and loose, fill it up and enrich it, then sow the seed where I want them to stand. It is not a ribbon bed, yet I like the effect all the better for having the colors mixed instead of massed. The soil is leaf-mold and sand, which does not bake, and is rich enough for almost any ordinary plant. Doubtless, many readers of the MAGAZINE have handsomer and costlier beds of flowers, but I think if they would devote one bed to annuals alone they would find that it repays them. You are not afraid to cut them, for they cost next to nothing, and the more you cut the more you will have. You do not have the trouble of keeping them through the winter, and you can easily give them up in autumn, because they will be there again, bright as ever, next spring.

Some one asked, in the June number, why her Pæonies did not bloom. Now Pæonies are the pet and pride of my mother's heart, and I grow them for her sake. How she gloats in early spring over their great ball-like blooms of dark crimson, pink and white. They will not bloom unless they have a rich soil, plenty of sunlight and a moderate amount of attention. They should be divided every second year, and the earth kept loose about the roots. The tops, after the season for blooming, must not be cut off, and sometimes, unless watched and showered with water, little brown ants will blight the buds.—KATE ELLICOTT.

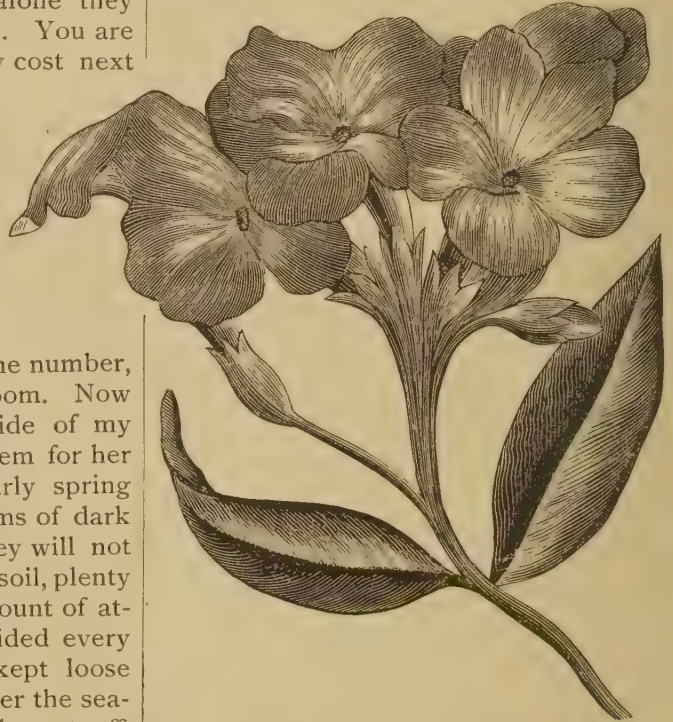
A FEW RARE PLANTS.

I am so pleased to find, once more, the pretty *Schizanthus* growing in my garden. I had it a dozen years ago, but did not know its name. I always admired it for its beautiful foliage and delicate flowers, so admirable for vases. In a package of seed sent me this last spring was one labelled *Schizanthus*, but I little thought that was the pretty plant the loss of which, several years ago, I had so deeply regretted; judge, therefore, of my delight on finding in its bloom what I so much desired. I learn that there is a white variety, but mine is the delicate lilac with a dash of yellow in the center.

I have an *Aspidistra variegata*, which

is, I think, very ornamental. The leaves are large and broadly striped; one has the white predominant, the other the green. It is especially adapted for the window garden.

Two plants sent me from Indiana, last spring, are but little known. One is *Streptosolen Jamesoni*. It belongs to the family *Scrophulariaceæ*, and was first introduced from Central America into France, where it has attracted more than ordinary attention as being one of the



STREPTOSOLEN JAMESONI.

finest decorative plants brought into commerce. The flowers are borne profusely in numerous trusses, are lobed, nearly an inch in diameter; color a bright orange, passing to rich cinnabar-red. It commences to flower early in March, and continues through June and July. It requires but little heat, and is nearly hardy in Europe. Although this plant was discovered by M. ANDRE, in 1882, and imported by him into France, yet it is stated to have been cultivated in England thirty-five years ago, when it was made known through Messrs. VEITCH, and figured in several botanical works under the name of *Browallia Jamesoni*. It was lost soon after its introduction, and did not reappear until about two years ago. It requires the same treatment as the *Bouvardia*. Cuttings strike

freely at any time, but the spring is said to be the most favorable. By starting them early and keeping them growing during the summer and winter, preventing them from flowering, good strong plants are obtained, which will bloom abundantly the following summer. The plant grows to a height of four feet, and is of a compact, shrubby form. The leaves, which are arranged alternately, are of a deep green color, and covered with a downy pubescence. A sandy soil, with a mixture of leaf-mold or well-rotted manure, is the best adapted for it.

Montbretia crocosmæflora is the other

thrived finely in the border. It threw up a spike two weeks ago, on which there are now, July 28th, four separate flower stems; these have fourteen buds, the largest of which is just beginning to reach the color of the flower, has eighteen buds. Another spike has started, on which are already revealed two clusters of buds. The form of these clusters is flat, and the buds are thickly set in a row each side of the stem, resembling a *Gladolus*. I am much interested in its development, and think it will prove to be a very attractive plant.—MRS. M. D. WELLCOME, *Yarmouth, Me.*



MONTBRETIA CROCOSMÆFLORA.

rare plant referred to. It is said to be a hybrid produced by crossing *Montbretia Pottsi* with *Montbretia Crocosmæurea*. "The flowers, relatively speaking, are enormous; they are of an intense orange shade, beautifully formed, and something in their arrangement on the stem is suggestive of the Orchid family. A single plant bears several spikes of flowers, each spike having from ten to twelve florets; it retains its bloom for a long time. The florets are very brilliant in fine cut-flower work. The foliage is somewhat similar to the *Gladolus*, but radiates like the spines of a fan, the flower-spikes also radiating with the foliage. It grows to a height of two and three feet, and is fully three feet across the foliage." LEMOINE says it is a plant of the first order, propagates very readily, flourishes in the open ground, and is also very effective as a pot-plant. Mine has

FLOWERS FOR THE CEMETERY.

We are beginning to use more bright flowers in cemetery lots. Until quite lately we saw mostly white ones there, because most persons associate the idea of death with something as far removed from gayety and brightness as possible, and also because white typifies purity, and the memory of our dead makes them pure to us, for the change blots out all faults and defects, and we think of them as having become "white of soul." Therefore, the white flower is full of suggestiveness for this use. But I consider any flower appropriate, for if we read the lesson of the flowers aright we see the beauty and wisdom of God's character in it, and such lessons are appropriate for any place or time. The flowers we plant upon graves are tributes of affection and remembrance, and any flower can transmit to them the message of our love. Let the cemetery be made bright and beautiful. Take away from it all suggestions of the "cold, chill grave," and let it typify the "summer-land of God," where the flowers are fadeless, and there are no graves.

I am asked by a correspondent to give a list of some plants suitable for cemetery use, hardy plants which require but little care, and from which a succession of bloom can be obtained through the season.

One of the best shrubs for such use is the *Deutzia*. It is an early bloomer, and its long, slender branches, with their profusion of white flowers are attractive anywhere. It is quite hardy, and given a good soil and an occasional pruning to remove old and broken branches, is about all the attention it will require. D.

gracilis is the best variety for small lots, as it is a dwarf grower.

The *Spiræas* are beautiful plants of the easiest culture. *S. Billardi* is rose color; *S. callosa alba* is pure white, and *S. prunifolia*, with its double, Daisy-like flowers, is one of the finest.

For large lots I know of nothing finer than *Hydrangea paniculata grandiflora*. It is perfectly hardy without any protection whatever, standing our most severe winters without the loss of a bud. That is more than can be said of many native plants. It blossoms in August and September, when most shrubs have ceased to bloom. Its individual flowers are small, but so many of them are borne in a cluster that it has the most massive effect of any shrub I know, and this without any appearance of stiffness or clumsiness. The flowers are waxy white, and last for a long time.

The best Rose for cemetery use, if white is desired, is *Madame Plantier*. This Rose is not a large one, but the flowers are borne in clusters, and the effect is fine. It is a pure white, a very profuse bloomer and a graceful grower.

An excellent evergreen shrub, growing low and spreading considerably, is *Daphne Cneorum*. It has pale rose-colored flowers, which are very fragrant. It blooms quite profusely in spring and at intervals thereafter during the season. It is perfectly hardy.

Among herbaceous plants we have no white one more beautiful than the *Asilbe*. It blooms early, and bears its little flowers in great profusion in clustered spikes, which have a feathery grace and delicacy quite charming and unusual among herbaceous plants.

I know of no more beautiful white flowers for the cemetery than some of our Lilies, especially *longiflorum* and *candidum*. They are hardy, and planted in good soil where water does not stand in spring, they will give increasing satisfaction year after year and require but little care.

For a vine to train about the enclosure of a lot, one cannot do better than to have our American Ivy. It is so hardy, so robust a grower, so beautiful at all seasons, that it occupies the same place in my regard with the English Ivy, which may be more desirable in some ways, but which has not the beauty of color which

its American namesake takes on in fall.

All the plants I have named are robust, self-reliant ones, and they will give pleasure which does not have to be paid for with a great deal of labor.

The Lily of the Valley is a beautiful plant for the cemetery. It blooms early, and no flower has more charms for us. Its purity, its fragrance, its grace makes it a favorite everywhere. It ought to be raised more than it is. It will do well in shade, and can be used where large evergreens would make it useless to try to raise many other flowers.—EBEN E. REXFORD, *Shiocton, Wis.*

ENCOURAGEMENT.

As many people who love flowers, but say they have no ground to spare for them, we would like to tell them that it needs but very little space and little care to have quite a variety and much enjoyment from the sweet treasures. In the door-yard we had a woodpile of loose sticks and whatever of rubbish is common to every family, like old boxes and pieces of barrels and bits of cast off articles in the wood line, so one day, four years ago last spring, we picked it all up and packed it in a smaller compass, and ordered four pieces of narrow board nine feet long and four feet wide, and then driving four stakes in the ground and with about half a dozen nails attached the boards to the stakes, forming the frame work of an enclosure for the plants; the whole costing the sum of fifty cents. This has been used four seasons, and looks good for another, which will make the expense not more than ten cents a year. The earth was strongly impregnated with decayed wood and with some loam of rotted sods, and a few pails full of wood ashes, well worked together, and all was ready to set in the plants. The result has been a success every way. Each season it has presented a different scene from any other, and has charmed every one that has seen it.

Look at it this year, 8th day of August, and see what it contains. First, there are fourteen *Geraniums* of different varieties, one of *Happy Thought*, occupying the center, covered with rich trusses of bloom; then five pots of *Cactus*, one *Coral Begonia* which is a perfect gem, one large bush of double purple *Petunia*, another of single white, one pot contain-

ing a Grape-vine seven years old, raised from a seed of the White Malaga, which is as handsome as an Abutilon; five bunches of Canterbury Bell, two colors; two Carnation Pinks, one Feverfew, one pot of China vine, five bunches of Bergamot, and at one corner a bush of Wormwood, kept for the beauty of its finely cut leaves, which exceed many choice plants in its showy, light green; fifty bulbs of *Gladiolus* just budding and coming into bloom, scattered here and there to fill spaces; one English Ivy; Pansies showing their bright faces in every little opening where they can catch the sunlight; two or three Morning Glories running over the tops of the tallest plants and giving their rich fragrance in the early part of the day; four Castor Beans, and one bunch of Sweet Williams, with a few smaller plants that it is scarcely worth while to mention.

The whole forms one dense bouquet, filling the air with perfume, and is the most attractive spot in the yard. Every year it has been a source of enjoyment purer and sweeter than could have been procured with so little expense in any other way, and no one need despair who can find a space four feet by nine, that perhaps otherwise would be taken up by rubbish, for with a little care and expense they will be well rewarded. We write this out to encourage some to try it for themselves.—T. S. D., *Brockton, Massachusetts.*

THE GOLDEN BELL.

The deep green leaved Forsythia, *Forsythia viridissima*, is a beautiful, hardy, ornamental, deciduous shrub, belonging to the natural order Oleaceæ. It is a native of the north of China, where it was discovered by ROBERT FORTUNE, growing in a garden in Chusan. It was introduced by him, in 1845, to the garden of the Royal Horticultural Society, and thence it was distributed. It is a shrub of vigorous yet straggling growth, attaining a height of six to eight feet, and having deep green, oblong, lanceolate leaves. It is one of the earliest and most attractive of spring-flowering shrubs, being covered in April with clusters of pendulous, bright yellow flowers, which are scattered thickly along the shoots of the previous season's growth. Towards evening the flowers are found to be very

slightly fragrant, although this is almost imperceptible, except upon a near approach. The Forsythia does best when grown in ordinary deep garden soil, as this insures well ripened shoots of moderate growth, rather than strong, succulent ones, which produce but few flowers, and if at any time the plant shows a lack of vigor, good and repeated dressings of manure can be given. As regards pruning, very little is required; do not prune in winter or spring, but, after flowering, shorten or cut out the old wood, if it is necessary to do so, and afterwards pinch back the young shoots occasionally, if necessary to preserve a proper shape. As a plant for forcing for the decoration of the conservatory or window garden, the Forsythia will be found to be very useful, and for this purpose the plants should be so grown as to induce them to form a head of well ripened shoots, each of which will produce a quantity of flowers; the flowers are quite durable, and a plant or so introduced into heat in November will flower by Christmas, and by introducing a few plants into heat occasionally a succession of bloom may be maintained all winter. When it is the intention to force the Forsythia, it is advisable to cultivate a few plants especially for the purpose. They should be taken up and potted in October, using as small a pot as possible, watered freely and removed to a cool cellar until wanted for use. After the flowers have decayed they should be brought back to the cellar and planted out again in May. It will all depend upon the growth of the plant whether they can be used another season or not, but generally they should have two or more season's growth before being forced again, as it is an easy matter to obtain a succession of plants. Propagation is effected by cutting of the young wood placed in heat early in spring, or it can be increased by layers.—CHARLES E. PARNELL, *Queens, N. Y.*

A GREAT YIELD OF BERRIES.

A correspondent, L. L. SWEET, of Manchester, N. H., informs us that five plants of the James Vick Strawberry, set a year ago last spring, produced, this season, six full quarts of berries, equal, in his opinion to seven of the large boxes in which the berries are usually sent to market.

ROSEMARY.

It is hard to say why this antique favorite should have entirely lost name and place in our gardens. Delightful in fragrance, its deep, hardy green lasting into the sternest frosts, if it does not, in our bitter northern seasons, keep its reputed "seeming and savor all the winter long." I have seen the young plants flourishing in snow at Christmas on the shore of Massachusetts Bay, and doubt not, with intelligent care, when two or three years old, it would bear any extremes, for Rosemary is no pot-herb, dying out in a few years, but a hardy undershrub; I have read, though it probably is not true, that on its native shores of the Mediterranean it grows to the height of twenty feet. One figures such a tree in Italian palace gardens, on the edge of the sea, its dark, stiff leaves sparkling with the salt crystalized from the spray, from whence comes its name. It is not, as popular fancy takes it, the Rose sacred to Mary, but derives its name from the Latin *ros marinus*, dew of the sea, and was so called by HORACE, OVID and other Latin writers centuries before the Christian era. Though some will find it less romantic than the Sweet Rosemary, the name is full of suggestions, carrying the pungent odor which the hub of grace bears, with so many other plants fed on the dust of rocks and salt dew of the wave, like the Sicilian Thyme and Greek Sage, and the Tar weed, of vulgar name, but classic odor, whose Thymy fragrance gives Pacific shores a mysterious wild charm. Of old there was no end to the symbols associated with Rosemary, or the esteem in which it was held. ROGER HACKET, in 1607, says of the Rosmarinus, the Rosemary, "It over-toppeth all the flowers in the garden. It helpeth the braine, strengtheneth the memorie, and is very medicinable for the head," all of which will be verified by any one who has noticed the wonderful refreshment gained in working over a bed of Rosemary and Lavender, whose scent banished fatigue and dullness as by magic. The effects of certain excellent odors is hardly prized as it ought to be. The perfume of plants is not for pleasure of the senses only, but is a rapid and wonderful stimulant to the brain, which receives the subtle essence before any fluid could be absorbed by the skin or blood. Late ex-

periments go to prove that odor is not, as supposed, extremely divided matter, but some quality of it which comes nearest our idea of spirit. Nothing so supremely affects body and mind as the incorporeal power of perfume. One waft from the white climbing Rose that grows over the door of home sets us twenty years back into the scenes of childhood. Opening a vial of essence bouquet brings before us the personality of the luxurious woman who always used it, and lays the spell of the pursuer upon us, as perhaps her very self in present guise might not be able to do; one whiff of stale Violets and a whole drama of love, grief and scorn is fleeting before one, over what the mind has long ceased to desire or regret. It is well if one can ordain to dwell among serene horizons and pure odors, purest and most penetrating of all, the Carnation, Lavender and Rosemary.

A soil half sand and an exposure in full sunshine suits the plant, which is slow in starting, but with half a chance is difficult to kill. A moist but not a wet soil forwards the young plants which are an interminable time growing their first inch. They like spraying with a vaporizer, and watering with weak salt water, which they relish as well as Carnations do. All seaside places should plant the Rosemary, which in fog and spray thrives till it forms a hedge of aromatic green. Along the shores of the Chesapeake Inlet it grows wild and flourishing, carrying down to later generations the tragic story of GRACE SHERWOOD, who planted it in colonial times. She was young and refined, and suffered the penalty of all whose taste and intelligence are beyond their surroundings. Neighborhood gossip set her down as a witch, and averred that she had been seen crossing the Atlantic in an egg shell to the shores of the Mediterranean, from which she brought the Rosemary slips as mementoes of her unholy voyage. On this accusation she was imprisoned, tormented, outraged, and if she did not die by law she died soon after her release, of the trouble undergone. For one to know a little more than one's neighbors, and especially to dabble with herbs, was once to risk fair fame and life. The former is still held a capital offense in some regions, but one may plant a herb-bed, and for all I know, gather Valerian by the

light of the moon without being charged with anything more than, perhaps, disordered wits; still one might risk as much for less cause.

The uses of Rosemary are a long list; I wish we each had as many virtues. Hung in a closet, it will keep away moths; grown in pots on the sill of a chamber, it purifies the air; a decoction of it is sovereign for restoring the hair; with other aromatics it forms Gardner's Compound, a strengthening lotion, whose aid to a weak spine and muscles I gratefully remember. As I never believe in medicine if I can help it, let all commendations have full credit. The flowers and young shoots are used in medicine. The distilled spirit of Rosemary is antispasmodic in doses of thirty drops in water. A tea of the flowering tops is good for sick headache and nervous ailments. Bathing the temples with a strong decoction removes faintness. Taken inwardly it enlivens the whole frame, promotes digestion, and cures jaundice, or liver complaints. The dried leaves are smoked as a cure for croup or asthma. The leaves make a liniment very warming and grateful to stiffened joints, indeed, in cases of fatigue and over-work it is a very herb of rest. The whole plant is burnt as a disinfectant; in times of the plague it was the principal one known. Its use in paralytic and epileptic cases brings relief if not cure, and the scent of the fresh plant seems to strengthen the whole body.

No wonder it was so valued that it held place in the highest ceremonials, coronations, bridals and burials. It strewed the pathway of queens at their crowning, and great halls at civic feasts. Sprays were woven in the bride's wreath and knots tied to her sleeves that she might recall the home she left in the happier one it was hoped to which she went.

"Well, well, since wedding will come after wooing,
Give me some Rosemary, and let's be going,"

sings an old song, and the old saying was, "when Rosemary flourishes the woman rules." The thriving plant in cottage gardens was held as a sign of the strong sway of the dame within. This, and much more, the Rev. HILDERIC FRIEND tells in his book of *Flower Lore*.

"There's Rosemary, that's for remembrance," is one of our best learned Shakespearean lessons, and for memory's sake sprigs of it were carried at funerals,

thrown upon coffins and planted on graves, which its evergreen foliage kept fresh and mourning the year round. Perhaps the Rosemary is not grown because the world is no longer good at remembering.—SUSAN POWER.

MY NEIGHBOR'S GARDEN.

I have a neighbor, a Methodist minister, who, though an invalid, manages to get more solid comfort out of common things than one would suppose possible.

Last spring he procured flower and vegetable seeds, and planted some in a small hot-bed, and some in the open. When time came for setting out Cabbage and Tomato plants he had a supply for his neighbors, for which he charged but a trifle, and yet his receipts more than covered the expense for seeds. To every child who wished them he gave Pansy plants, and prepared beds and beds for himself.

All this month, July, that family has eaten Cabbage, Peas, Cauliflower, Beans, and Potatoes. They have given away Peas by the peck to whoever would come and pick, given Cabbage, given Cauliflower, given bouquets of all sorts of common flowers and some choice sorts. There is a bed of about one hundred Pansy plants, with clumps of blue Lobelia mixed in. The bed faces east on the street, and the comical little Pansy faces defy any one to pass the gate without nodding to them, their eyes are so magnetic. Some of them (the eyes,) are set crosswise, others slant Chinese fashion, some have one eye cocked up and the other drawn down with a twisted mouth underneath, reminding one of a mischievous school boy. Then, here is one face with both eyes and mouth drooped in a very solemn manner, while close beside it one peeks up so full of fun that you are obliged to laugh yourself. Indeed, there is no expression of face that those Pansies are not up to, while as to color, O, they are simply indescribable. In the garden is a spot some twelve feet square, given wholly to Drummond's Phlox, and another to Verbenas, both hedged on one side with Sweet Peas and bordered on the other with twenty feet or so of Sweet Alyssum. A row of Zinnias borders the path to the stable. A great long row, three feet wide, of common Petunias, with now and then a wonderful velvet grandiflora. Over yonder

is a bed of lovely Pinks, bordered with Candytuft; then a mass of old-fashioned Ten-weeks Stocks, then more Pinks of another kind, and Mignonette abounds, and Balsams and more Sweet Peas, &c. Color and perfume without end, and not a weed to be seen. This work is all done by one man, and he prepares I don't know how many sermons each week, for he preaches and preaches, here and there, and is considered worth listening to, too. He claims that the garden work gives him strength for mental labor. Certainly such a garden is enough to inspire one to all good thoughts and deeds.—R. A. HOLTON, *Smithville, Ill.*

A RASPBERRY RAMBLE.

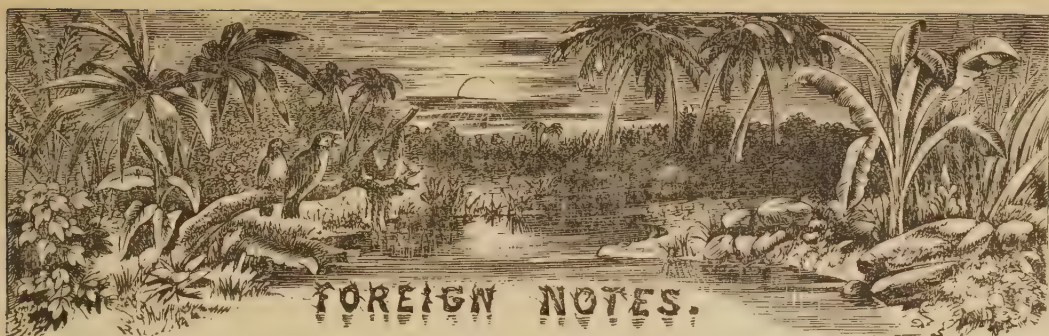
Antwerp Raspberries are not flowers, but they are as bright as flowers and as fragrant, too, after they have been picked and are lying in their pure, fresh color on a dish. With some Currant juice to impart acid they make the finest jam known. If made from freshly picked fruit and at once sealed close, the fragrance as well as the flavor are most delectable when the jar is opened. It is proverbial that nothing delights an English school-boy more than to smear his face with Raspberry tart. An excellent means of perfectly sealing such preserves, and with the least possible trouble, is to have a few cents worth of clear paraffine at hand, and as soon as the jar or glass is filled, shave a few thin slices upon the surface; the heat will melt and diffuse the paraffine into a perfectly protecting film or cake, which will exclude air and completely repel and prevent any mold or stain or loss of aroma. It imparts no taste at all of its own, and it can be taken off clean in a moment, rinsed clean by a dip into water, and used again and again.

Having thus passed the easy transition from gay flowers to bright red Raspberries, I must mention a sort of these last sent from Colorado, where they were found at an altitude of a mile and a half, where snow lies in latitude 70° till late in June, and the summer is but a few weeks long. Many lovely flowers are their companions in those wintry attics of the earth, and, of course, all are necessarily of a quick, brief growth, flowering and fruiting very early. Among red Raspberries the Cuthbert is notable for its earliness and hardiness, and the resem-

blance in leaf, complexion, style of growth and general habit, is so close between the cultivated Cuthbert and this sort, from near the snow line in Colorado as to justify the opinion that the Cuthbert is either of the same stock or a close bred hybrid of it.

While talking of Raspberries, I will add a curious experience with a Cuthbert, from which a useful lesson can be drawn. All who have grown Raspberries know that, like Strawberries and some other plants, they have the power of locomotion, and are not condemned, like trees in general to stand all their lives in one self-same, unchangeable place, unless they are moved by the wrenching violence of the transplanter. True, the motion is slow, only two or three steps in one year, yet this counts, and, as an example, I know of a garden bed in which a row of Strawberry plants were set along one edge, and a row of early Peas next to it. When the Peas were grown and gone the Strawberry plants moved, by their runners, or "steppers," as we might call them, into the Pea ground. Then, when the original row had yielded its fruit it was dug up; next spring the ground was planted with something else, and a crop of fine Strawberries gathered where the Peas were. These plants stepped on into the next line of ground where Rose Potatoes, or some other early crop was purposely set; and so every year the berries moved themselves thirty or forty inches, until in this way, step by step, they reached the other side of the bed, yielding prime berries from fresh plants yearly, with a minimum of care or trouble.

In the case of the Cuthbert Raspberry, the plants moved themselves entirely from the garden in which they were planted, but where they were harassed by weeds and trampled by chickens and other bipeds, to an adjoining garden where there was clean ground and quiet, and there they are flourishing and fruiting handsomely. A mere vestige of them is all that is left to the negligent gardener who bought the plants and set them out. They tunneled the fence to escape bad treatment. It seems as if plants possess some modicum of intelligence. They make efforts to avoid what harms them, and to approach what benefits them, which is more than can always be said of some of the proud lords of creation.—W.



A LONDON FLOWER MARKET.

"Middle-aged people who in their young and vigorous days 'did' the early market at Covent Garden as one of the recognized sights of London," says a London daily paper, "no doubt will be under the impression that they have seen all that is to be seen there, and know all about it. They are under a great delusion. If for once on a Saturday morning—or any other morning of the week for that matter, but Saturday morning is the best—they will muster a little of their pristine energy and will turn out and make for Covent Garden in time to be there between six and seven o'clock, they will find a market altogether different from the one they have in remembrance. There are few things of the kind more remarkable in London than the enormous development of an interest in flowers, and those who know the headquarters of the trade only as it was twenty years ago, or ten years ago, could hardly fail to be amazed at it as it has appeared during the past spring and early summer months.

"The visitor who makes his way towards it from any point of the compass between six and seven o'clock in the morning will be inclined to suspect that he is too late, and that the market has already begun to dissolve. Intermittent streams of flowers are dribbling away in all directions. Market carts are already rattling off into the suburbs with tailboards all aglow with colors that would make a rainbow ridiculous; donkeys and their barrows go tottering over the stones under burdens of blossoms that would have made sensational flower shows in days not so very long ago; small capitalists are trudging off with bundles of Stocks or armfuls of Pinks; and here and there a cab may be seen stuffed with

pots of Mignonette and Lobelia, and piled up on its roof with Trumpet Lilies and Fuchsias, Pelargoniums and Calceolarias. Fleet street and the Strand, which an hour or two before had been all astir with the newspapers, have now subsided a little, and every now and again quite a floral procession may be met moving through the still, sleepy thoroughfare, and pleasant whiffs of Musk and Heliotropes and Roses come upon the morning breeze. The stranger is apt to think that the market must be getting thin; but as he turns up either of the streets leading directly to it the stragglers he has met appear to be altogether insignificant. A whole neighborhood is literally choked up with flowers, the actual market being only the central point of the trade which surges through all the surrounding thoroughfares and flows out into the Strand. Wellington street is closely packed with vehicles laden with flowers, and the buildings on each side are barricaded with them. The office of the *Morning Post* seems to be embedded in a thicket of India Rubber plants, Delphiniums and scarlet Geraniums; the Lycium springs from a tangled undergrowth of Marguerites and standard Rose trees, Clematis and Tropæolums, Cockscorns and Antirrhinums, and the shop fronts of both sides of the way are banked up with boxes of Golden Feather and Lobelia, Pansies, and serried ranks of the most beautiful Fuchsias. The dense growth spreads away down the narrow thoroughfares into Catherine street; all along Tavistock street scores of burley porters are pushing their way about with mountains of pendant bloom upon their heads; on the steps of the Strand District Offices a stalwart dealer sits and smokes his peaceful pipe, securely shut in from the surging crowd by a fortifica-

tion of Strawberries and ripe Tomatoes in baskets, bundles of Water Cress and Ericas, Maidenhair Ferns, and the most delicate Arum Lilies. Burleigh street is quite a part of the market. St. Michael's Church stands knee-deep, so to speak, in Ixias and Dracænas, Phloxes, and herbaceous Calceolarias; and the flood of gleaming color spreads away right down into the Strand, where vans and carts, unable to get nearer to the central point, are packing and unpacking their treasures.

"Of course, this has always been a busy spot in the early morning, and these breezy slopes on the north of the Strand have from time immemorial breathed odors of Cherry Pie and Mignonette before breakfast, whatever may have been their fragrance afterwards. But no such displays of flowers as may be seen now were ever dreamed of a few years ago. It seems but the other day that flowers formed only a minor feature in the market, and that the trade was pursued beneath a number of rickety sheds on the outskirts. Only a few years ago the Duke of Bedford set up a substantial building, with a superficial area of some sixteen thousand feet. This we believe was something of an experiment and seemed at the time likely to meet the utmost requirements of the trade for many years to come. But we have been æstheticising very rapidly since then. Our artists have been impressing upon us the beauties of Sunflowers and large white Daisies, and government has been setting us practical examples in the parks and public gardens of what may be done with flowers; and though our artistic censors have not yet subdued our inborn delight in crude scarlets and yellows, and our public guides have sorely misled us in their 'prentice-hand partiality for ribbon borders and carpet-bedding, we are undoubtedly moving on in the charming pursuit of floriculture. 'Flowers for the garden' and 'All a-growin' and a-blowin', have become familiar ditties in our suburbs. Hundreds of hardworking fellows now do a good peripatetic trade that was never thought of ten or twenty years ago, and the spacious building constituting the head-quarters of the trade has long become all too small for the purpose."

From the further account, it appears this flower market is to be enlarged by an addition of one-third of its present

size, and it is expected that it will, even in that condition, soon prove too small for the demands of the trade.

HORTICULTURAL EXHIBITS.

In an account in a recent number of the *Journal of Horticulture*, of the summer horticultural exhibition at Sefton Park, Liverpool, we notice two classes of exhibits which have received little, if any, attention in this country. The first of these is what is designated as "effect groups," and consists of groups of plants arranged for their fine appearance collectively. Three premiums were offered for groups of different sizes of circular and semi-circular form. The largest space was limited to two hundred and fifty square feet, and for the best group in this space a gold medal was offered. The group that took this prize is thus described:

"In the center of the space a pyramid, having a base six feet in diameter, was raised of Maidenhair Ferns with Lilioms interspersed, the apex of the pyramid being formed of a neat plant two or three feet high of Dracæna Baptisti, with Panicum variegatum falling over and covering the pot. The remaining portion of the space was occupied mainly with Adiantum cuneatum, so as to form a saucer-like surface; and rising from this here and there, as if on pedestals, were beautiful Crotons and Palms, the pots hidden by Selaginellas and Panicums. A few Statice gave color to the group, which was margined with variegated Dactylis and Ferns. The arrangement was, perhaps, a little formal or 'dotted,' but was undoubtedly effective."

In the collection that won the prize in the smaller circular group of one hundred and fifty feet, "the prominent plant was a Phœnix reclinata on a central mound of Ferns three feet high, with which was associated Campanula gigantea. The base surrounding was occupied with Ferns, small Coleuses, Caladium argyrites, &c., with larger plants rising above them of Crotons, Palms, Rhodanthes, the edging being Ferns, Gloxinias and Panicums."

A semi-circular group gave variety to the arrangement, and the chief prize for this was taken "with an effective and well balanced arrangement of flowers and Ferns."

This mode of exhibiting, it will be observed, is essentially different from that commonly employed in this country under the head of the "best collection" of plants, or even the "best display," as generally understood, and in both of which cases regard is had more to the character and number of the plants than to the grouping and general effect of the whole. In arranging for effect, well-grown plants are as essential as they are in competition for the "best collection" or the "best display," but numbers are not so necessary, and, in fact, by the condition of space they are limited to a comparatively small number, but they must be very fine, and skilfully placed together. A greater number of exhibits ought also to be brought out in competition for effect.

The other class of exhibits alluded to is "table plants." Plants for table decoration have never been employed in this country to a desirable extent. It is a beautiful custom, and should be encouraged by our horticultural shows in all parts of the country.

CUTTING BACK OLD PLANTS.

The most common practice with overgrown, leggy specimens of hardwood greenhouse and stove plants is to cut back these just as they, under ordinary circumstances, would break into growth. The practice of pruning back into the oldest wood in the early autumn months instead, has proved beneficial in many cases where it has been tried on *Camellias*, *Lagerstræmia Indica*, *Clethra arborea*, *Acacias*, *Melaleucas*, *Theophrastus*, *Ficus* in variety, *Cacao*, *Bombyx*, *Draœnas*, &c.; and these having been afterwards kept moderately dry and not exposed to any high or unsuitable temperatures, broke in innumerable places on the old shoots and stems. Many plants, when so pruned, were quite without foliage, in fact, the best results followed when every leaf-bearing shoot was cut away, for when any such are left there appears to be a tendency for such shoots to start into growth when the plant becomes excited by returning warmth in the spring, as well as under artificial excitation. Under these circumstances the shoots protruded from the old wood, in which situations these are most desired, become much reduced in numbers. It is better to keep greenhouse plants in semi-

dark places, where the sun has no power, nor light either, to stimulate the plants into growth before April. Such localities are best afforded by a straw-thatched and matted structure than one made of brick or other impervious material. So long as such a building is proof against hard frosts it is better for the plants, as there the air can never become unfavorably dry, owing to the free entry of the moist outer air in the months from September to March. Plants belonging to the stove and intermediate houses are better kept in the shadier parts of houses, where a night temperature of 50° is not exceeded and where they are not liable to drip, or to the play of the syringe, as the object should be to keep them also as long in a comparatively inactive state as possible. That complete inactivity does not prevail in either cool or warm house subjects under this treatment, is proved by the growing wartiness of the rind, which can only be felt at first by passing the hand over the branches, but which becomes visible early in February, by a great number of pointed protuberances in the rind itself, that point to the coming shoots which are very gradually developing below, and in the bark itself. With cut-back plants potting or tubbing should slightly precede the actual bursting forth of the growth, the roots having by that period gained some slight degree of visible activity. If deferred until actual branch growth has begun, many rootlets and root leaders must be cut off or get broken off in the operation, which represent just so much wasted force. Generally it will be found advisable to compensate the loss of branches by cutting away some of the more inert and fibrous portion of the roots when repotting, as roots will then be rapidly replaced, that will do their work better than the old ones, besides correcting the disproportion between the sizes of the plant and the receptacle.—*Gardeners' Chronicle*.

MAGGOTS IN ONIONS.

A writer in *Gardening Illustrated*, says, "I have tried for several years, with entire success, one pound of saltpetre dissolved in hot water, applied in four watering cans of cold water through the rose." The watering cans are probably two-gallon cans. A correspondent of *The Garden* says, "Watering once or

twice with soap-suds, or one part of paraffine (kerosene,) oil to sixteen parts of water kept well mixed has been found very useful." The mixture of soap and kerosene that has often been mentioned in these pages, is probably the best form in which to apply kerosene. If these remedies are effectual in preventing the work of this destructive insect on the growing crop it is valuable information; but we fear that the proper remedy should be applied before the seed is sown, and we think the advice given in another English journal, to the following effect, is safe to follow. Give the "ground a good dressing of salt and soot the winter previous to planting. Use about two bushels of soot and one of salt to the perch; less salt if it is a clayey soil."

AN ODDLY-FORMED BEGONIA.

A late number of the *Gardeners' Chronicle* publishes an engraving, here reproduced, of a very peculiar and novel form of Begonia of the Rex class. "It



BEGONIA COMTESSE LOUISE ERDODY.

originated from seed of *B. Alexander von Humboldt* hybridized with *B. argentea cupreata*," by the gardener of a Hungarian nobleman, Count ERDODY. "The leaf, of a metallic lustre, appears dark silvery in the center, shading into a coppery-rose toward the margin, which itself is evenly and broadly edged in the same hue, but darker and still more brilliant. The veins are yellowish-green on both sides, accompanied by a dark green ribbon about one-eighth of an inch

broad, while, owing to an elegant undulation of the leaf, they run in a sort of groove close to the margin of the leaf.

"The principal attraction, however, of this novelty consists in the peculiarity that the two lobes at the base of the leaf do not grow side by side or over-lap each other, as is the case with the other varieties of the class, but continue to grow in a screw-like way, as indicated in the engraving, forming a regular spiral on the top of the leaf to such an extent that a full-grown leaf shows a spiral-shaped top of four complete windings, and nearly two inches high.

"Leaving alone the great value of this acquisition as regards striking coloration and compact, neat growth, this strange and novel habit distinguishes it from all existing forms."

The entire stock of this plant is now in the hands of a Prussian florist, who is propagating it. In the course of a year, or more, it will probably come into the possession of some of the enterprising plant-growers of this country.

EARTHING UP CELERY.

We all seem to have different ways of doing things. My way of earthing up Celery, or rather preparing for that operation, is to tie up the plants some long time before any soil is put to them. This support to the leaves causes a more upright growth and keeps them together, when the earthing up can be done easily and quickly without any of the soil getting into the hearts of the plants. Instead of cutting away the ties and removing them, we leave them on. They rot off quite soon enough, and if they do not decay it matters little, as Celery cannot well be held too closely together to bleach and keep out the wet. The soiling up piecemeal, as is practised by many, is, I think, a mistake, as the plants require much water all the time they are growing, and it is impossible to give them this after they are earthed without washing some of it in amongst the leaves, and that either causes them to rot or cripples the hearts.—J. S., in *Gardening Illustrated*.

OILING LEAVES.—A correspondent of the *Garden* states that exhibitors at the shows in England oil the leaves of plants like Crotons and Dracænas to give them a polish.



SPORTS AND SEEDLINGS.

Enclosed find flowers of the *Pelargonium*, Fred. Dorner, procured from you more than a year ago. Last summer it bore only the light-colored flowers. This spring it branched near the root, and has another distinct-colored flower. How do you account for it? What I want to know is, whether you ever propagate except by cuttings or seeds, if not, it must be a sport.

I have another flower, curious to us. Last spring I sent to you for Daisy seeds, and must say have such a variety of beautiful flowers, among them what would be termed more than double Daisy. The upper or center part, and below it two rings of centers, making fifteen in all. The plant has produced several unusual flowers, but none quite as large as the first.—MRS. L. C. WELCH, *Silverton, Oregon*.

The *Pelargonium*, Fred. Dorner, and all other varieties, are multiplied only by cuttings. It is not strange that it should bear a flower of a color different from that of the typical variety. Such instances frequently occur in plants that have sprung from very dissimilar parents. In our commonly cultivated plants it is most frequently seen in the flowers of the *Verbena*. Such cases are called sports. The physiological causes that produce this effect are not fully understood.

In raising Daisies from seed quite a variety of interesting forms may always be expected.

THE CURRANT BORER.

You would greatly oblige me by giving me information in the following respect: A worm goes into my Currant bushes, eating its way through the entire pith in the various branches. I had formerly about a dozen bushes of excellent sorts, which I cut and cut, trying to get the worms out, and finally I dug them all out and threw them away. After about four years I got new bushes, and have been nursing them, but I now see marks where the worms have eaten their way out through the bark in innumerable places. You would greatly oblige me by giving a remedy.—C. B. H., *Chicago, Ill.*

The insect complained of is probably the imported Currant-borer, *Ægeria tipuliformis*. It is the larva of a small moth that comes with the first warm summer

weather. The female lays her eggs one in a place on the young tender shoots, and the larvæ hatch out in a few days and eat into the center of the stem; here they burrow up and down, and feed on the pith all summer. When arrived at full size and ready to change into a chrysalis a large place is worked out in the stem, and a hole gnawed through the woody part, and only a thin covering of outer bark, or epidermis, left. At the commencement of the following summer the chrysalis, by its movements, breaks an opening and then the moth hatches out. The bushes should be examined in the fall, and all stems showing signs of borers should be cut off and burned. The same treatment early in spring will keep the number of insects low.

The American Currant-borer is the larva of a beetle, but it produces results similar to the one above described, and the plants require the same treatment.

BERMUDA LILIES—DAPHNE.

Please inform me, through your MAGAZINE, how to treat Bermuda Lilies. I have the Easter, Giant Lily and Great Red Lily, brought me from Bermuda a year ago. I kept them dry through the winter, potted in the spring in garden loam. They throw up no leaves, but devote themselves to producing more bulbs. They are strong and healthy looking, but not satisfactory. Do they require a different soil, and should they be freely watered, or moisture withheld?

Does the age of *Daphne odorata* make any difference with its flowering? I have a very old one which has not bloomed in several years, and has become a miserable looking affair, in spite of repotting and proper treatment. I have withheld water some seasons, and used plenty at others, but with no success.—MRS. M. W. D., *Brooklyn, Conn.*

The Lily bulbs should be potted as early as August, if possible, but at any rate some time during the fall. After potting set them away in a cool, moist place, such as a cellar, and give enough water occasionally to maintain a slight

moisture in the soil. The bulbs can be kept in this condition from three to six months, and during that time will be making roots, and when brought to the light and given increased heat and moisture will not fail to make leaves and to bloom.

The age of the *Daphne*, here mentioned, is probably not the cause of its failure to bloom, but this is due to its enfeebled condition, as is evident from its being a "miserable looking affair." *Daphne Indica*, as we suppose this plant to be, is usually given too high a temperature by amateurs. Fifty-five to sixty degrees is warm enough for it through the winter, and it should have a moist atmosphere during its growth, and be kept moderately supplied with water. It can be well kept out of doors in summer in a sheltered and partially shaded position.

PASSIFLORA—NEMOPHILA.

Is *Passiflora cœrulea* hardy in the latitude of New York city, and do you think it would do well on a piazza on the west side of a house?

I have a Fern bed on the west side of the house, which is shaded all day, do you think the *Nemophilla* would do well there?

Is it common for the Dutchman's Pipe, *Aristolochia Siphon*, to seed? I have a vine which has a six-sided pod about one and one-half inches long on it, but did not see the fertile flower.—W. C. B., *Jericho, New York*.

Without having positive knowledge, we can only say that it is probable that *Passiflora cœrulea* with the protection afforded by some litter, or leaves, would safely winter in the locality inquired about. Possibly some of our readers, for instance, Mr. C. E. PARNELL, may be able to give more exact information.

The *Nemophila* is well suited with a shady spot.

The Dutchman's Pipe blooms freely, and seeds when old enough.

SWEET-SCENTED GOLDEN ROD.

The last number of the *Gardener's Monthly* states that the sweet-scented Golden Rod, *Solidago odora*, is coming into use as a substitute for Chinese-Tea, "and has actually become an article of considerable commerce." Its use originated fifty years since with the Germans in Pennsylvania, and it has increased in popularity from that time to this. Large quantities, it says, are sold in Chicago at a dollar a pound.

RUBUS GRANDIFLORUS.

In nearly every catalogue I see described *Rubus grandiflorus*, or Bridal Rose, as something especially nice, having "large flowers, blooming in winter." I kept wishing for one a long time, and finally became the possessor of a fine plant. "Give it plenty of room," I was told; so I put it in a box some eight inches square, which it soon filled. I nursed it one winter, but it gave no bloom, though it made a rampant growth, just like a Blackberry, which it is. I summered that plant and it gave no returns, simply ripened its foliage, dropped it and put on new. A misfortune took it from me the next winter, but this spring a lady gave me a few small shoots with roots, which I planted in the open garden, and pretty well neglected till I observed budding stalks reaching up. The buds were no larger than pin heads, but I could wait. Well, I waited and watched for some weeks, then plucked a spray of Bridal Roses, somewhere near three dozen Roses in one cluster, which I picked off and packed in my thimble, No. 6, and the thimble was not yet full. Such monstrous flowers! I discovered no fragrance, but no matter. The time of bloom is midsummer, but that is nothing; the plant might be made to bloom in winter, of course, and would it make a difference in the size of the flowers, think? I'm afraid not; yet after all the disappointment, I shall still grow *Rubus grandiflorus*, but not in winter, unless I have an abundance of room to spare.—R. A. H.

Rubus grandiflorus is a hardy plant, and the open garden is the best place for it, where it will bloom in summer. If kept in the house it will bloom early in



FLOWER OF RUBUS GRANDIFLORUS.

the spring. The engraving here shown of the flower, is only about two-thirds of the full size. It is evident that the plant R. A. H. describes is something else than *Rubus grandiflorus*.

A LOVELY MODEST FLOWER.



A Rose grew on a stately bush,
A pale and graceful Rose,
And all the flow'rs around her watched
Her fragrant leaves unfold.
"Ah! me, how very fair she is,"
A bright, blue Larkspur said;
"Aye, purer far than snowdrifts are,"
Came from the Pansy bed.

"Yon fleecy cloud is not," declared
The Four-o'clock, "more white;"
"Nor are the Glories," cried a Pink,
"That come to bless the night."
"And," said an Easter Lily, with
A little, curious sigh,
"They call me fair, but she, I own,
Is fairer still than I."

The white Rose heard her comrades' praise,
And, ere they'd ceased to speak,
The faintest, faintest tinge of pink
O'erspread her modest cheek;
And lo! upon that bush no more
The snowy bloom was seen,
But, in her stead, a blush Rose reigned,
The garden's lovely queen.

—MARGARET EYTINGE.

CRAPE MYRTLE

I wish you would inform me, through your MAGAZINE, how to care for my Crape Myrtle. I have one which is eight or ten years old, and has never bloomed. I keep it in a tub in a light cellar during the winter, and change the earth in the spring, and stand it in the yard in summer. It grows finely, but does not bloom.—MRS. E. J. COOK, *Princeton, Ill.*

The treatment here described is quite proper for the Crape Myrtle. We suppose you are sure that you actually have the plant you suppose it to be. Such mistakes have been known.

HABROTHAMNUS.—The plant for which name is required by A. D. C., of Tremont Station, N. Y., is *Habrothamnus elegans*.

THE DOVE ORCHID.

I have three bulbs which were sent me a few days since from the Isthmus of Panama, called by the natives "Espirito sancto," which, being interpreted, means "Flower of the Holy Ghost," named by a Spanish priest at the time the country was first settled. The flower is quite large, cup-shaped in form, and is composed of five broad pinnate, or pointed, petals, and in the center is a perfectly formed dove. Two of the bulbs are blooming, and the other is quite small, and no indication of buds. I wish you would inform me what I am to do with the bulbs after they are done blooming. They, no doubt, require a period of rest, like most bulbous plants. Is there any way of preserving the flower? Would alcohol, diluted with water, preserve them? Any information you may give me on the subject will be gratefully appreciated.—MRS. E. D. CARPENTER, *Norwood, Bergen Co., New Jersey.*



The plant described is a very popular Orchid. *Peristeria elata* is its correct name. After flowering the plants can be kept rather dry and in a cool temperature; sixty degrees is high enough for it during the winter months. At the approach of spring increase the temperature and water, and it will then make its growth preparatory to its summer bloom. There is no better way to preserve the flower than by carefully pressing it.

LILIES—SCALE INSECT.

I am very fond of Lilies, but having always heard they were hard to raise, I never tried any but the common kind till last year. Then I bought the auratum, superbum, and the Harrisii, and made a bed by spading out the earth a foot deep, and filling it to a few inches above the surface with rich loam and manure from the compost heap, which was composed of decayed weeds, trash, &c., equally mixed. I then planted the bulbs six inches beneath the surface. I then covered the bed well with coarse manure and leave from the stables. This spring I removed the manure, and in May one Lily came up a little slender thing, and now has one flower. The rest never came up at all, though the bulbs were sound a short time ago. Please tell me why I failed. Was it in the planting, the time of planting, or are they apt to behave that way? Will they be likely to ever come up or not.

Can any one tell me what will take lice off my Oleander; they look like bran and stick close to the under side of the leaf. Is there anything that will kill them?—A. B. SMOTHERS, *Jobe, N. C.*

Apparently the Lily bulbs were properly planted, unless the manure may

have been too fresh, which does not appear. Try once more, this fall, and plant some good sound bulbs in the same place, without digging in any more manure, and cover the soil with some leaves after planting.

Take a small camel-hair brush and dip it in alcohol or kerosene and soft soap, diluted with water, and go over the Oleander plant and touch each insect with it, and then with soap and water wash the stem and all the branches until no insects can be found.

SEASONABLE WORK.

The hints afforded in our pages, each month, in the "Garden Journal," leave little to be said on this subject, and yet it may be well to remind some of our readers that the present and following month will be active ones in the garden. A prominent feature of the work will be transplanting of all kinds of hardy trees and other plants. Most kinds of hardy ornamental trees, with the exception of coniferous evergreens and Magnolias, most of the hardy flowering shrubs, fruit trees, with the exception of the Peach, vines and small fruits, excepting the Strawberry which should already have been set, hardy flowering bulbs, and hardy herbaceous perennials, and Asparagus and Rhubarb in the kitchen garden, can now be moved. On many accounts this season is preferable to the spring for this work in even severe climates. Some protection, such as is afforded by a cover of leaves will usually make all newly transplanted stock secure for the winter. In the spring it is ready to grow at the earliest opportunity. Much can be done now in preparing soil for spring crops. Pruning of vines and trees can be performed after the fall of the leaves.

SOME GRAPE NOTES.

At this time, the fifteenth of September, and in this locality, Moore's Early is quite ripe, in fact, has been fit to eat for two or three days. Champion is in the same condition, and there is no appreciable difference in the time of ripening of these varieties. Moore's Early is of somewhat better quality than Champion, but it is a low grade; it is a light bearer, and the bunches are small, loose, and not well defined in form. It will probably continue to find favor on ac-

count of its earliness. Pocklington and Niagara are soft, becoming translucent, but not quite fit for use, and will require at least another week to ripen. Amber Queen is fairly well colored, and in another week it will be ready to eat. Duchess will require about another week, but is, even now, very good. This variety, we believe, is destined to be very highly and generally esteemed when it becomes well known. Delaware is only partly colored, and half the berries are yet greenish. Concord is yet but little colored. In the lake vineyard regions of Western New York, Delaware was cut and sent to market the last of August, and Niagara about the eighth of September.

AN OUTLOOK.

At the present time we are yet unprepared to make any particular statements in regard to our terms of subscription to this MAGAZINE for another year. In a general way we can say that they will be as liberal as they have been for this year; and if, in the next few weeks, any clubbing arrangements with other magazines and papers can be made that will be superior to those that now exist, we shall announce them in our next issue. Many of our subscribers took advantage of our terms to procure the weekly and monthly publications of the HARPER'S, and many more will, no doubt, this year, avail themselves of them. We anticipate that the welcome *Good Cheer* has made for itself in every household where it has been received, will secure for it not only a renewal, but several new friends in every neighborhood. As a family literary paper we do not know of its equal, and it is adapted to the tastes and requirements of both young and old. In its moral tone it is faultless, and is especially valuable for the reading exercises of the school-room, and Sunday schools are discovering its merits and introducing it. It would be a pleasure to know that each of our subscribers the coming year received *Good Cheer*.

TUBEROUS BEGONIAS.

How are Tuberous-rooted Begonias propagated?—S. B., *Zeeland, Mich.*

Plants of the natural species are raised from seeds, and hybrid varieties are increased by leaf-cuttings.



LILIUM HARRISI.

HARRIS' LILY.

This handsome variety of Lily first received notice in horticultural circles in 1881, when it was exhibited at the New York Horticultural Society, by W. K.

HARRIS, of Philadelphia, Pa. It is considered by critical judges to be a variety of *Lilium longiflorum*, more nearly resembling the variety *eximium* than the typical *longiflorum*, and consequently

has been supposed to be a seedling of the variety *eximium*. The truth of this supposition cannot, however, be verified, for its origin is obscure, and there is cause to think it is derived from Japan. But whatever its history may be, the plant is a valuable one to plant raisers, and those who admire the Lily family.

The freedom with which this variety blooms is very remarkable. While bulbs of *longiflorum* often come "blind," or fail to bloom, bulbs of this variety of the size of a Hickory nut send up vigorous flower stems and bloom freely. *L. longiflorum* bears usually only one to two flowers on a stalk, but bulbs of Harris' Lily, of medium size, produce about a dozen flowers to the stalk. Instances are related of as many as seventy flowers to a bulb, and a plant of it raised in Bermuda was brought to New York in the spring of 1882, having on it one hundred and forty-five blossoms, nearly all of which were open at the same time. A peculiar characteristic of this variety is the habit of sometimes throwing up a second flower-stem, and producing a number of perfect flowers as a second crop, thus extending the season of bloom. Those who have had experience in raising it say that three or four times as many flowers can be raised with the same number of plants as of *L. longiflorum*.

Another quality it possesses is earliness; plants forced for winter-blooming coming in a month earlier than any other sorts. The flowers are large, trumpet-shaped, much longer than those of *L. longiflorum*, with the ends of the divisions recurved, pure waxy white, and extremely and agreeably fragrant.

It has been found that the bulbs of this Lily are of very superior quality in the island of Bermuda, apparently having greater vigor than when raised in our drier climate.

Another advantage of the Bermuda bulbs to florists in this country is that they mature very much earlier there than here, consequently can be dug and brought here before ours have ripened. Then bulbs planted early make plenty of roots in the fall, and are ready to give fine blooms the ensuing season. For forcing they are especially valuable, as they can be brought into bloom quite early with proper management. So remarkably well does this variety succeed

in Bermuda that it is now becoming known as the Bermuda Easter Lily.

A GARDEN JOURNAL.

October 1. Very heavy frost, killing Tomatoes, Corn and all tender plants.

2 and 3. Taking up all Geraniums that are wanted in the greenhouse and for stock.

4 and 5. Picking Duchesse d'Angouleme, Louise Bonne de Jersey, and other autumn Pears. Commencing to take in the greenhouse plants, for it is quite cold; frost every night.

6. Potting Hyacinths and Polyanthus Narcissus, and plunging the pots over the rim in a cool, moist cellar.

8, 9 and 10. Carrying in Onions to the floor of the fruit house. Giving the Celery the final earthing up.

11. Planting Lettuce in frames at the greenhouse, where the Violets are to force for winter use.

12. Planting Lettuce in cold-frames to winter over for early spring. Putting Parsley in cold-frames, where it will keep pretty well, and can be used all winter.

13. Picking the Figs for preserving, the early frosts preventing them from ripening. Made the first fire in the greenhouse to-day.

15. Picking the last of the Seckel Pears.

16. Gathering the Concord, Delaware and all other out-door Grapes. Six degrees of frost, injuring all Grapes that have been left out.

17. Digging between the Strawberry rows preparatory to fall mulching.

18. Digging up Chicory, and starting it in the root-cellar to give it a little rest before commencing early forcing.

19. Tying up more Endive to blanch; if much is tied at a time it is apt to rot, if the weather is wet and warm. Endive that is to be kept in frames for the winter should not be tied up at all, but planted in the soil and covered with any dry material, and so blanched; it will keep much longer in this way.

20. Saving seeds of annuals. Bringing in hanging baskets. Emptying vases on the lawn.

22. Digging up *Caladium esculentum*, Cannas and *Gladiolus*, and putting them away in a dry, warm cellar. Four degrees of frost this morning.

23. Cleaning the flower-beds and borders of all dead plants and refuse, preparatory to fall digging.

24. Commencing to dig up some parts of the garden where Corn, Potatoes and Tomatoes have been growing. I believe fall digging to be very important work; it allows the frost to act upon the soil as it could not do if not dug, and thoroughly pulverizes it, making it much better for spring crops.

25. Cutting back the Climbing Roses in the greenhouse. Pulling up Bean poles and placing them away.

26, 27 and 29. Thinning out and cutting back the Hybrid Perpetual Roses, leaving the strongest canes to be laid down rather close to the ground, where they will be securely tied to stakes. It is intended to let them remain in that horizontal position hereafter, where they will make wood and flower from every eye.

30. Emptying old hot-bed frames and piling up the manure. Some of it will be used for flower beds in the spring, and the rest for potting soil.

31. Cleaning off Artichoke stalks and drying off the tubers, and storing them in the root-cellar.

THE LUTIE GRAPE.

A new variety of Grape, now in possession of CHISHOLM AND COLEMAN, of Nashville, Tenn., by whom it is to be sent out this fall, originated near Nashville, Tenn., by Dr. L. C. CHISHOLM, and is attracting considerable attention in that vicinity. Raised in the same soil and with similar cultivation with most other popular varieties, it is claimed that it possesses more good qualities combined for profitable Grape culture than any one of them. A recent letter from the proprietors describes the fruit as of a rich red color, compact bunch, resembling Perkins or Venango, but larger in bunch and berry, thin skinned, tender, juicy and very sweet even when beginning to turn, and a most prolific bearer. In point of flavor it is equaled by none except the Delaware, and is four times its size, and much the same color. It has fruited for seven consecutive years, and so far has shown no signs of rot, blight, or any disease. Out of nearly a hundred varieties on Dr. CHISHOLM's place, this season, every one showed rot, more or less, but Lutie; it was the only perfect Grape there. It ripens early, about with Moore's Early, but can be put on the market a few days sooner, as it is sweet before fully ripe.

If this variety maintains the good qualities claimed for it, it will be wanted in all parts of the country, for we are, as yet, far from being supplied with satisfactory varieties of Grapes.

COTTON-SEED MEAL.

In looking over your July number I notice an inquiry about the manner of using Cotton-seed meal as a fertilizer. I have been using it for pot plants for the last three years, and find it a powerful fertilizer, being very rich in ammonia. In my practice I compost the meal with about ten times its bulk of good earth, at least a month before it is wanted for use; in that time the meal will be thoroughly rotted and incorporated with the soil, and can be used without risk. I have had no experience with it in the open ground, but a great deal is used in this section in field culture. This compost is very rich, and will give surprising results, making the plants grow off rapidly. The meal should never be used in pot culture without being rotted, as it will burn the roots of the plants.—THOS. F. MILLER, *Charleston, S. C.*

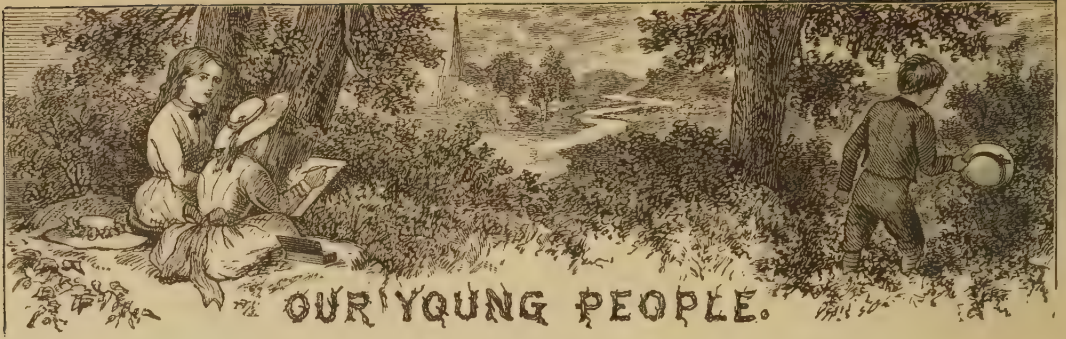
BEET SUGAR.

According to *The Sugar Beet*, the able journal published in Philadelphia, and devoted to the Sugar Beet industry, 90,000,000 pounds of beet-sugar from European countries entered our ports last year. This, it states, is "about eighty times more than the combined efforts of the sorghum factories. Hence," it remarks, "Americans consume a product of foreign labor and capital, and refuse to employ hundreds of thousands of their own people in one of the most important of the technological arts."

MIDSUMMER MELODY.

The air is heavy with the Roses' scent,
And tremulous with music all the night;
While over all the moon's soft, silvery light
A glorious beauty to the scene hath lent.
The Eglantine breathes out its rich perfume
And musky fragrance on the midnight air;
Nature hath donned her dress of brightest bloom,
And diamonds sparkle on her bosom fair.
The world is full of beauty; earth and sky
Are redolent with loveliness, while heaven
Seems not so far away. My soul would fly
Beyond it all, like birds when tempest-driven.
The radiant glory of this night can be
But faintest type of heaven's reality.

—LILLA N. CUSHMAN.



OUR YOUNG PEOPLE.

NORA'S OUTBURST.

III.

The next morning all parties in the Lawson home were up before the sun, as the girls were to be off to Stony Creek while the day was cool.

The previous evening Nora had instructed the boys to arrange the kerosene stove on the back porch, as Christine had used it, which, to Marian's surprise, had been done, and the water was already boiling when she came down.

"Are you going to bother with the Salsify this morning?" inquired Nora.

"Indeed, I am; and the thought of the fried oysters we are soon to enjoy, so far away from the sea, is appetizing, believe me."

She then proceeded to prepare a small portion of the batter as though for batter cakes, and taking of this in the proportion of one cupfull to three of the Salsify, she stirred them evenly together. Lumps of this mixture were then dropped from a tablespoon into a heated skillet, or on a griddle, well buttered. They were kept in nearly oval shape by passing a knife around the edges before they were "set," and when turned, and both sides browned, they were ready to be dished.

Nora watched every detail, determined to surprise her mother with the same dish when she should have returned, feeling sure that if she did not make a perfect success of the first trial in all the detail of seasoning, proportion, etc., she should the next.

Let no young girl smile at Nora's simple ambition; it was the first time she had ever felt any in this direction, and was the beginning of a change in some of her ideas, which proved a fruitful source of self-satisfaction afterward, as well as admiring comments. Even an Irish maid once declared that "Nora Lawson's apple-

coostards wud ravive the dyin'." But at this stage of events a breakfast is waiting, and where are Edgar and Edwin?

They had been invited to join the girls at Stony Creek in time for luncheon, but had declined because of a previous engagement. Wishing, however, to do something to enhance the girls' pleasure, they betook themselves off betimes in the direction of the cascade. Having completed their morning's exploit satisfactorily, they started for home across the sloping meadow lots, and with leaps and bounds soon reached the back yard, when, suddenly changing pace, they walked demurely into the house. Nora, half vexed, exclaimed:

"You poor twins! you look as heated as though you'd done half a day's work. Some mischief brewing, I'll warrant."

If the brothers despised anything, it was to be called twins, and Nora knew it. But Edgar only answered:

"O, we've been taking 'a constitutional' for our appetites," Edwin adding, "And now we are ready for breakfast."

"Breakfast has been ready for you so long," said Marian, "that we have our luncheon basket already packed."

"Yes," added Nora, "and after breakfast you'll please take that and Marian's flower-press up to the cascade, and we shall be ready to follow soon after."

At table, the boys' keen appetites stimulated their praises of the new dish, and finally Nora's query as to the origin of this manner of cooking the vegetable, brought forth a little history from Marian.

"Soon after the civil war," she explained, "my married sister engaged a middle-aged cook who had long been a slave in the family of a son of the noted Col. Crittenden, of Virginia; her mother having been a slave of the latter, while she herself was a child. When asked

her name, she simply said it was Violet. After a few days she seemed to be pining and homesick, and it was learned that she had a husband who came north with her. When my sister heard this, she exclaimed,

"Why, our Violet is pining for her Johnny-jump-up." So he was sent for and employment furnished him, after which she was happy, and proved to be an expert in her line, from the making of a bride's cake to the roasting of a pig, or the production of mock oysters. So this is the origin of the dish in our family, though by no means a new one, for it has long been a favorite in many parts of the south."

Breakfast being concluded, the programme for the day was finally initiated by the two parties separating in the yard, the boys taking to their saddles and the girls to the uplands where Stony Creek tumbled down into a ravine which widened out, fifty rods below, into a lovely glade, completely shut in by trees. As the girls approached the place where there should be a view of the cataract, and found the sight obstructed by a tent, an exclamation of surprise escaped them both.

They suddenly halted with a conviction that the ground was occupied in advance of them. Then Nora, seeming to have made a discovery, rushed on a few paces, and turning, cried out to Marian to follow, declaring it was for their own use:

"For, see!" she said, pointing to a line of letters painted on the canvass, "'E. & E. Lawson, Piscatorial Headquarters.'"

"Sure enough," said Marian, as they advanced nearer, "and all the letters are made of fishes curved in any sort of way to suit the artist's need. What an idea! And Nora, dear, don't you think this is what the boys were doing so early this morning?"

"O, of course, it was; and I repaid them with mock pity, because they were heated, as I thought, unnecessarily, and linked it with a term they became disgusted with in childhood from its continual application. I shall make amends for my rudeness in some way. Meantime, we'll get all the enjoyment out of the tent we can, as there is really very little shade near us."

Talking thus, she passed within, while Marian stood outside looking for the

clumps of orange-colored flowers she remembered having seen there the previous summer. But neither flowers nor plants were visible. She was about to announce the same to Nora when the latter emerged from the tent announcing that the lunch basket was missing, although its companion, the flower-press, was safe inside.

It was soon decided that the basket was stolen, and if so, that the thief could not be far off. So, after following the ravine until its banks were lower and more sloping, they saw a partial opening in the tangle of wild growth that skirted the bank, and peering through, could see a wild-looking woman trying to adjust herself in a sitting posture on the steep bank, and lo! she had the missing basket.

"Gypsy!" exclaimed the girls, simultaneously, and calling loudly and stepping forward, as though to go down, the old woman scrambled to her feet, and grabbing the basket, slid and slipped downward, until reaching the stream she followed its course. Despite the excitement of the moment, Marian could but note the lovely Ferns and vines still glistening with dew, lying broken and be-draggled in the old woman's wake.

"Shall we give it up?" asked Nora.

"No, indeed; if we didn't care for the basket ourselves, she shouldn't have it. Let's step away from the bank so she cannot see us, and hurry on down where the descent to the creek is easy. It is still so early the camp cannot be far away."

"Why, Marian, aren't you afraid?" queried Nora.

"No, indeed. Papa says the gypsies don't dare do any serious harm in this part of the world, since the population has become so dense, lest they be driven out of the country."

By this time they were near the glade, and turning at right angles soon made their way down where a log spanned the creek, and whence they followed the woman through the trees beyond, until she reached the boundary line of Mr. Lawson's grounds. While she was getting herself and basket over that, the girls gained on her, laughing as they ran, at the ridiculous escapade. Two men from a camp just beyond came to meet the old woman, and wrenching the basket from her grip, returned it to the girls,

explaining that she was insane, and made them great trouble.

Having soon decided that they should not return to the tent until after luncheon the girls settled themselves in a cozy nook a little way up the stream, where the wild beauty of their surroundings could be enjoyed to the full.

"How fortunate," said Marian, "that our adventure should have brought us here. What a delightfully cool breeze sweeps down from the ravine! and how laden it is with the aroma of the luscious growth that drapes these banks in 'mottled greenery.'" And thus on and on she talked, Nora smiling and responding, until finally she exclaimed,

"Marian, your enthusiasm would inspire a stone!" and received for answer:

"The stones are already inspired, see how they have clad themselves in delicate Mosses."

A few hours later, after having had a "delicious time," as Nora said, the girls, with baskets laden with rooted plants, and many delicate ones for immediate pressing, approached once more the neglected tent.

Neglected? Apparently not.

The girls stopped in amazement. No less than three men were sitting near the tent; one of them working at the lever of the plant press, the others looking on. From their surrounding appurtenances it was evident they were sportsmen or geologists, or perhaps both.

After a moment's parley the girls walked quickly forward, halting at a proper distance, when Marian said, in clear tones,

"Sirs, when you are done with that article, I would like the use of it myself."

The men sprang to their feet, in confusion, lifted their hats, handed over the press, with apologies, explained that one of their number was taken ill while "crossing the country," and was lying inside the tent to rest awhile, and that they should vacate immediately, etc.

Nora assured them that they were going directly home, that the owners of the tent would soon be there and render any needed service to the sick man, and straightway the two walked off, saying to each other, "What next?" They soon learned. Coming in sight of the house there were signs of its active occupation.

In silent wonder, not a word was exchanged until Nora, cautiously entering an open door, exclaimed:

"You blessed, old Christine!" Explanations followed, after which a hopeful letter from her mother was perused. The boys soon returned, and learning of the day's adventures, started away "to kill off a few gypsies and drunken poachers," declaring that it was evident that girls weren't made to wander off by themselves, which, by the way, is very true in these days of chronic transition.

Marian remained until the odious suitor had left the Glen House in despair; and soon after Mr. Lawson's return Nora privately passed upon that young lady such a voluble eulogy on her various characteristics as enforced the thought,

"Well, I am thankful that Nora has found another sort of 'outburst.'"—AUNT MARJORIE.

MOTHS AND BUTTERFLIES.

Moths and butterflies are wonderfully curious insects, for they are not always dressed with gay wings, but change from caterpillars to chrysalis, then to butterflies and moths. They seem almost like beautiful flowers floating about in the air, for some of them are gorgeously colored. They love the same dainty food on which the busy bees and tiny humming birds live, and this is the honey which they find in flowers. Therefore, their drinking cups are of the most exquisite kind, being the chalice of the pure white Lily, the tube of the Honeysuckle, and the sweet Clover blossoms.

The butterflies love the sunlight, and flit from flower to flower through the day, but the moths prefer the darkness and twilight, and most of them fly only at night. Both moths and butterflies vary greatly in size, some being extremely small, while others measure several inches across the wings.

Place the wing of one of these insects under a microscope, and it is indeed most beautiful to examine, for it seems as if some are covered with brilliantly colored feathers, while others look as soft as velvet.

The bodies of moths are relatively much larger than those of the butterflies, and while the wings of the butterflies are alike on both sides, those of the moths are brilliantly colored only on the upper side.



When at rest the wings of the butterfly are usually held erect, and touching each other; those of the moths either in a horizontal position, slightly inclined, or wrapped round the body.

The antennæ of the butterflies are straight, thread-like, and slightly knobbed at the end, while those of the moths are sometimes hooked, and then, again, like a small feather, projecting on either side of the head.

There is one species of butterfly, called *Euplæa humanata*, which is used by some of the natives of Australia as food, for the insects are so numerous on the rocks that fires are built and the smoke suffocates them. Thus the inhabitants are enabled to gather quantities, and removing the wings from the bodies, take the latter and form them into cake, which they eat.

There are many species of both butter-

flies and moths, some of very beautiful and gorgeous coloring, and others of more sombre hues.

The study of entomology is extremely interesting, and valuable collections of various kinds of insects can be made, which will prove a source of great pleasure and instruction.

THREE ROSES.

I.

Bright Roses for love, now choose thee,
Which is the fairest and best,
From budding bush in the border
To the Rose tree's regal crest.

II.

All bright, dewy-tipped, and fragrant,
Delicate, dainty and shy,
A secret, sweet, in its bosom,
A tear and a smile in its eye;
This half-opened bud which blushes
Its fringes of moss above,
I choose, for its grace and beauty,
As symbol of maiden's love.

III.

For its lustrous, matchless splendor,
For joys its beauties impart,
For the lavish way it squanders
The richest sweets of its heart,
For its queenly air and color,
The depths of its velvet hues;
Symbol of wifely devotion,
This royal, Red Rose, I choose.

IV.

For purity, fair and spotless,
For breath, fresh as early morn,
Because its warm heart is golden,
Because it has ne'er a thorn,
Because its blooms are unfailing,
So sweet none can e'er refuse;
Symbol of mother's affection,
This modest, White Rose, I choose.

V.

These three sweet Roses lie clustered
In tender grace on my breast;
Had love but one dowry brought me,
My life would still have been blest.

—DART FAIRTHORNE.



THE CENTURY.—*The Century* magazine will commence, in the November number, a series of papers entitled "Battles and Leaders of the Civil War," the object of which is to set forth, in a clear and graphic manner, the life and spirit of the most important of modern military conflicts, the War for the Union. In many instances the papers will be contributed by officers first in command, and in every instance by a participant in the engagements under consideration. Generals GRANT, BEAUREGARD, ROSECRANS, and Admiral PORTER, Rear-Admiral WALKER, and Col.

JOHN TAYLOR WOOD, have engaged to contribute. Personal reminiscences of several of the most prominent military leaders, now dead, will also give variety to the scheme. In conjunction with them will appear, from time to time, a number of brief sketches entitled, "Recollections of a Private," reflecting with interesting and life-like details the experiences of the common soldier from the time of enlistment to the muster out; the drill, the march, the bivouac, the skirmish, the charge, the pursuit, the retreat, &c., &c. *The Century* has at its disposal a very large quantity of maps, plans, portraits, and paintings, drawings and photographs of camp scenes, battlefields, famous localities, &c., which will be used in preparing illustrations of the best character to accompany the text. The aim is to present an authoritative record of the human and heroic aspects of the great conflict.

REPORT OF EXPERIMENT STATION.—We have received a copy of the "Second Annual Report of the Board of Control of the New York Agricultural Experiment Station, for the year 1883, with the reports of the directors and officers." It is a work of nearly three hundred pages, and contains a full report of the work of the station for the year 1883. It is a State document, and is issued at Albany. The work done by the station, as most of our readers are aware, is of great importance directly to the interests of agriculture in all its branches, and indirectly to our whole people. The present report reflects much credit on those immediately connected with it, and honors the judgment and enterprise of our commonwealth. Each succeeding year will increase the value of the work that has been accomplished, and the investigations of the station, if continued in the reliable manner in which they have been conducted to the present time, will form a most reliable guide in the work of the farmer, the gardener, the fruit-grower, and those of kindred pursuits.

THREE CITIES AND ROCK ISLAND ARSENAL.—This pamphlet of a hundred pages is a gem of the printers' art. Fine paper, clean printing, beautiful engravings, and all displayed with the best taste, make it a delight to the eye. The three cities are Davenport, Iowa, and Rock Island and Moline, Illinois, and the book contains their history, and an account of their present condition. A very full account of the United States Arsenal at Rock Island forms an important feature of the work, and the many fine engravings of views in the several cities add to its interest and beauty. The Moline Plow Company is a business concern of mammoth proportions, and its "Flying Dutchman," a three-wheeled sulky plow, is sent into all parts of the country. The book has been prepared by B. F. TILLINGHAST, Davenport, Iowa.

CREAMING MILK BY CENTRIFUGAL FORCE.—A treatise on the above subject, describing and illustrating the principles of the process, the history and progress of the system, the various separators in the market, the merits of the process as compared with other systems for raising cream, etc., etc., will be sent free, by mail, on receipt of price, 50 cents, by J. D. FREDERIKSEN, Little Falls, N. Y. This subject is one evidently worthy the attention of dairymen, and the most intelligent persons among them are giving it examination.

ACKNOWLEDGMENT.—For the illustration of the Harris' Lily, in this issue, we are indebted to F. R. PIERSON & Co., of Tarrytown, N. Y., who kindly loaned us the engraving. This firm raises the bulbs of this Lily in large quantities, in Bermuda, and imports them here for the general trade.